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Special Programs

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GRADUATE SCHOOL

U.S. Department of Agriculture
Washington, D. C. 20250

1969-1970

Special Programs To Meet Government Agency Needs

UNITED STATES DEPARTMENT OF AGRICULTURE
Clifford M. Hardin, *Secretary of Agriculture*

GRADUATE SCHOOL

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Code 111, ext. 3039 or 388-3039

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Code 111, ext. 6337 or 388-6337

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SPECIAL PROGRAMS DEPARTMENT

THE GRADUATE SCHOOL

Institutes, Workshops, Seminars, and Special Courses
designed to supplement in-service training programs of government agencies

Special Programs Department Graduate School, USDA
277 National Press Building
529 Fourteenth Street N.W. Washington, D. C. 20004

THE GRADUATE SCHOOL

The objective of the Graduate School of the United States Department of Agriculture has always been to provide needed educational opportunities for government employees. The Graduate School has six main programs: resident evening, special, independent study, international, public lectures, and the press. Graduate study is a primary interest of the School, but it also offers a large number of undergraduate as well as non-credit courses. All courses are open to qualified employees of government agencies and to other qualified persons as facilities permit.

The Graduate School does not grant degrees and has never sought that authority. It prefers to give courses of standard graduate and undergraduate quality, to assure that quality through the competence of its instructors, and to cooperate with the degree-granting institutions.

The United States Civil Service Commission accepts the credits of the Graduate School, for examination and qualification purposes, on the same basis as those from accredited colleges and universities.

The government of the Graduate School is vested in a General Administration Board appointed by the Secretary of Agriculture. The functions of this Board are similar to those of a board of trustees of a college or university. The School is administered by a director and a small administrative staff. It is nonprofit and receives no Federal funds.

SPECIAL PROGRAMS

The daytime courses of the Special Programs Department are primarily designed to meet the needs of government agencies.

The staff of this Department includes training and development specialists whose primary responsibilities are to respond to agency requests. They are available to give advice and develop ideas to help the agency meet its training and development requirements.

Special programs take various forms—seminars, institutes, workshops, and traditional college-type courses. Some are all-day sessions ranging from one day to eighteen weeks; others meet an hour or two once or twice a week for several months. Regular credit courses are also presented during working hours when such courses will more appropriately assist in filling the training needs of the agency.

Classes are held in the Federal Triangle area and in the vicinity of the Graduate School offices in the U.S. Department of Agriculture's South Building. Upon request, classes are taken to the building in which the agency sponsoring the course is located. Some intensive seminars are held out of town in such places as Williamsburg, Virginia.

Public programs:

Regularly scheduled courses open to all qualified government personnel and announced in this bulletin.

In-Agency programs:

The Special Programs Department will redesign any course offered by the Graduate School or develop new courses to meet the specific requirements of any agency. Special courses can be conducted on site anywhere in the United States. The Special Programs staff will be happy to assist any agency to meet special training needs.

Overall guidance for all Special Programs courses is provided by the Special Programs Committee listed on page iv. Other committees include the Committee on Computer and Management Sciences, listed on page 17; the Committee on Executive Development, General Management and Supervision, listed on page 1; the Committee on Critical Issues and Decisions, listed on page 1; and the Committee on Communications and Modern Learning Methodology, listed on page 48.

PROFESSIONAL STAFF

EDMUND N. FULKER, *Assistant Director and Head of Special Programs Department*

DEE W. HENDERSON, *Associate Head of SP Department and Curriculum Manager*

J. FRANK KENDRICK, *Associate Head of SP Department and Curriculum Manager*

C. PAUL BARLOW, *Curriculum Manager*

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MARGARET BROWN

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DONNA CARUSO

ALMA PALMORE

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ROBERT PHILLEO, *National Institutes of Health, HEW*

JOHN WILL, *Office of Personnel, Commerce*

JOHN D. YOUNG, *Bureau of the Budget*

POLICIES AND PROCEDURES

NOMINEES should meet the qualifications indicated for each course. Exceptions may be made if a strong need for training exists and if it would be advantageous to the agency. Address inquiries to the designated members of the Graduate School staff.

NOMINATIONS should be submitted by the due date, which is usually three to six weeks before the start of the course. (See dates given for each course.) They should be submitted on agency letterhead using the nomination form format given on the inside back cover page of this bulletin. Nominations should be signed by an agency official, a training officer, or other person so designated, who has responsibility for approving and submitting nominations to the Graduate School.

INDIVIDUALS WITHOUT A SPONSORING AGENCY should use the nomination form format (see inside back cover page) to apply for any course.

NON-GOVERNMENT PERSONNEL may enroll in any class.

ACCEPTANCES will be sent out approximately one week after the nomination due date informing both the agency and the nominee and giving instructions as to where to report for the first session.

COURSE FEE INCLUDES TUITION, BOOKS, AND MATERIALS. Course fees are payable in advance; a contract, purchase order, or billing instructions accompanying the nomination will be accepted as advance payment. Individuals without a sponsoring agency may use the nomination form with a check for the full amount of the fee. Checks should be made out to the Graduate School, USDA.

CANCELLATIONS will be accepted without charge if received in writing two weeks or more before the start of the course. After the cancellation deadline, the entire course fee is payable. Substitutions may be made at the discretion of the school.

ACADEMIC CREDIT. The U. S. Civil Service Commission accepts the credits of the Graduate School, for examination and qualification purposes, on the same basis as those from accredited colleges and universities.

GRADES. At the close of the course, the student receives written notice by mail of the grade he has received. The following letter grades are used:

A	Excellent	F	Failure
B	Good	Aud.	Auditor
C	Fair	Inc.	Incomplete
D	Passable	W	Withdrawn

TRANSCRIPT OF RECORD. An information record or transcript may be obtained according to the policy of the Graduate School as outlined in the catalog of the Evening Program.

INSTRUCTORS. The faculty of the Graduate School is recruited mainly from scholars employed in the Federal service. Most faculty members have taught in high schools, colleges, and universities before joining the Federal government. Because their positions in the Federal government relate closely to the subjects they teach in the Graduate School, they bring a fresh academic point of view and a practical approach to the classroom.

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Curriculum in Executive Development, General Management and Supervision

This series of courses and seminars is designed to provide educational experiences tailored for specific groups of supervisors, managers, and other professionals in Government Agencies. To the extent possible, each course provides opportunities to explore problem areas which have been found to be common among the professional groups for which the courses are designed.

To assist the Graduate School Staff in maintaining the currency and pertinence of the courses relative to Agencies' needs, special advisory committees provide guidance.

Committee on Executive Development, General Management and Supervision

FRANCIS MULHERN, *Agricultural Research Service*

Department of Agriculture, Chairman

WALTER ADAMSON, *International Bank for Reconstruction and Development*

LOUIS DEANGELIS, *National Security Agency*

JULIUS EITINGTON, *Park Service, Department of the Interior*

CLARE HENDEE, *Forest Service, Department of Agriculture*

HENRY HERRELL, *Consumer and Marketing Service, USDA (retired) Consultant*

ALVIN W. NORCROSS, *Civil Service Commission*

LEONARD POULIOT, *Smithsonian Institution*

EDWARD PRESTON, *Internal Revenue Service, Treasury Department*

MARY SETTLE, *American Red Cross*

ROBERT STOCKMENT, *Small Business Administration*

BERTRAM STRAUSS, *Consultant*

JOHN THURSTON, *Agricultural Stabilization and Conservation Service*

Department of Agriculture

Critical Issues and Decisions Program

The Critical Issues and Decisions program was developed by the Graduate School in 1961 to provide a broadening educational experience for executives which was not being offered in the Washington area. The original set of readings for the program was prepared under contract by the American Foundation for Continuing Education. Each offering of the program is critically evaluated and improved upon; consequently, the program is continually modified to reflect the changing needs of the executive participants and our changing times.

As a public service, the Graduate School has offered free lectures (in addition to the Seminars) by Critical Issues and Decisions scholars, and four of the lecture series have been published and are available from the Graduate School Press.

Committee on Critical Issues and Decisions

JOHN G. LORENZ, *Library of Congress, Chairman*

CHARLES BLITZER, *Smithsonian Institution*

JACK CARLSON, *Bureau of the Budget*

ERNEST FRIESEN, *Administrative Office of the U.S. Courts*

GRANT MOON, *Small Business Administration*

JAMES REESE, *Postal Service Institute*

THEODORE TAYLOR, *Bureau of Indian Affairs, Department of the Interior*

CHARLES W. WILLIAMS, *National Science Foundation*

D6-5 Critical Issues and Decisions for Government Executives

A series of seminars held twice weekly, for six weeks for career executives in positions of high responsibility.

Description: Under the personal and direct tutelage of leading writers and scholars the participants become better acquainted with some of the most critical issues facing this country. Emphasis is placed on conducting a joint search for knowledge and understanding. Scholars who have appeared in the program include Wernher von Braun, James Bostain, Seymour Lipset, Jack Carlson, Hans Morgenthau, Ambassador J. R. Wiggins, Roy Wilkins, Philip M. Hauser and Bishop James Pike.

This program is conducted in two phases. The first is an all-day session for introduction and orientation. The second is a series of 2-hour seminar meetings.

Objectives: On completion of this course, the participant will be better able to: • More critically evaluate problems confronting the government • Apply more incisive analytical techniques in formulating policies and making decisions in his agency • Cultivate a broad base of knowledge and experience in areas of governmental concern

Schedule:

FALL

Phase I — November 5, 1969, 9:30 a.m.-4:30 p.m.
Phase II — November 10, 12, 17, 19, 24, 26, 1969
December 1, 3, 8, 10, 15, 17, 1969
Seminar A: 10:00 a.m.-12 Noon
Seminar B: 1:30-3:30 p.m.

Nominations Due: October 15, 1969

SPRING

Phase I — March 26, 1970, 9:30 a.m.-4:30 p.m.
Phase II — April 2, 7, 9, 14, 16, 21, 23, 28, 1970
May 5, 7, 12, 14, 1970
Seminar A: 10:00 a.m.-12 Noon
Seminar B: 1:30-3:30 p.m.

Nominations Due: March 2, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

Qualifications: Participation is limited to federal executives of the GS-14 (or equivalent) level or above and a few promising potential executives below that level. Seminar groups are limited to 25.

Course Fee: \$285.00 payable in advance. Fee includes text books and class material.

D6-5(B) Critical Issues and Decisions at Belmont

A one week intergovernmental dialogue held at Belmont, between noted scholars and federal, state, and local executives.

Foreword: Increasingly, the American government leader sees his function extending far beyond the solution of problems on his desk or the public crisis of the hour. The successful executive is concerned about developing a realistic perspective of his times and an ability to assess trends, opportunities, and challenges related to the critical issues and turbulent changes of today's world.

While he realizes that facts are important for effective decision-making, he knows that long range effectiveness requires more than facts alone. It demands a comprehension of trends and their direction, identification of important forces in our society, and a recognition that our **governments** are involved in shaping situations and forces through making and enacting enlightened policies and decisions. It demands that local, state and federal executives understand each other's views on the critical issues of our day.

Description: In pursuit of this executive development the Graduate School has designed a one week program that provides an opportunity for local, state and federal executives to search for knowledge and understanding in a forum with leading scholars of our time such as Max Lerner, James Farmer, Carroll Quigley, Alfred deGrazia, Jack Carlson, Sterling Tucker, James C. Bostain, Gustave Gilbert, Adam Yarmolinsky and Hans Morgenthau.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Objectives: On completion of this program, the participant will be better able to: • Consider broad social, economic, and intergovernmental political forces and problems • Examine the impact of these forces and problems on government decisions at local, state and federal levels • Identify approaches to problems and anticipate changes and policies growing out of current situations • Apply more incisive analytical techniques in formulating policies and making decisions in his organization • Develop broad-gauge but practical leadership qualities

Selection of Participants: Candidates are selected by application. Selection is dependent on current responsibility and position, plus past education and experience. Participants are selected to insure a wide cross-section of the local, state, and federal governments.

Size of Participating Groups: The number selected will be limited to twenty-five. Others who qualify will be placed on a waiting list and offered the opportunity to enroll in a later seminar.

Tuition and Fees: Tuition for participation is \$475.00 for the week, which includes meals, lodging and reference materials.

Location and Atmosphere: Belmont—the Smithsonian Institution's Conference Center at Elkridge, Maryland—is located thirty-five miles from Washington, D. C., twelve miles from Baltimore, and eight miles from Friendship International Airport. The highways from these points are excellent.

Belmont is a "think and discussion center" in an estate-locked retreat free from the distractions of telephones, callers, staff-meetings and office routine. The facilities are clean and comfortable, but not swank. The participants are entertained as guests in an eighteenth century country house, which provides comfortable hospitality combined with solitude and serenity conducive to good thinking and discussion for executives concerned with public problems.

Schedule:

Fall program: November 16-21, 1969

Spring program: April 12-17, 1970

The program begins with a reception, dinner and orientation session on Sunday evening and closes with a luncheon the following Friday noon. Applications must be received on or before October 27, 1969 for the fall and March 24, 1970 for the spring.

Nominations for this course may be made by using the nomination form format on the inside back cover page of this bulletin.

D6-41 The Future

Charles Williams and leading contemporary scholars

Its Critical Relationship to Public and Private Policy Makers

Description: A serious study of the future and its possible alternatives deserves immediate attention. More than ever before the development of physical and social technologies have advanced to the point that we have the choice of creating significantly different kinds of futures. Such choices are unavoidable. But it is evident that we are not making these choices with the benefit of deliberate, integrated, coherent views of either the possibilities of what might be or the consequences of what will be. The potential tragedies of unwise decisions can be of a magnitude to threaten civilization in the future. Therefore, some fundamental choices must be made to realize our historic possibilities.

The Graduate School of the United States Department of Agriculture recognizes its responsibility to focus attention upon such alternative futures to improve the personal development of Public and Private Executives; those Executives seeking broadened development toward more effective competence in policy making.

Objectives: While comprehensive coverage of all the critical issues of the future or "in-depth" treatment of any one issue is not feasible, the seminar is designed to: • Stimulate the participants to a greater awareness of the importance of thinking in long-range future contexts • Introduce them to proper approaches and methods to be employed • Acquaint them with selective representative issues likely to be directly relevant to public and private policy in which they will play a role; and • Help relate the alternative futures to critical issues and these in turn to their relevance for current policy formulation and program development.

Qualifications: Candidates are selected by application. Selection is dependent on current responsibility and position, plus past education and experience. Participants are selected to insure a wide and diversified seminar composition. The number of participants is limited to 25.

Schedule:

Courses will be held:

Fall: October 13-17, 1969

Spring: March 23-27, 1970

Nominations due:

September 29, 1969

March 9, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington, D. C.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Course Fee: \$375.00. Fee includes books and class materials. Travel and per diem are in addition. A \$100.00 deposit or authorized billing instruction must accompany the nomination form.

Cancellation Policy: Should a participant be forced to cancel within the first week after nomination due date, a \$20 processing fee will be charged. Should circumstances dictate cancellation after that, a fee of \$100 will be charged. The candidate may transfer the tuition to the next program, if notice of intent is given when cancelling.

D6-16 Executive Effectiveness

Dr. Charles F. Austin

A Seminar-Workshop on the Management of Managers

Description: This high level 5-day seminar-workshop on the management of managers provides an exceptional opportunity for an executive to examine his (or her) effectiveness as a manager within an organization. It transcends just the analysis of a person's effectiveness as a manager, subordinate and group (or team) member; it provides knowledge to improve personal effectiveness in each of these roles.

Accomplishing the high objectives of this program demands an intensive effort by those participating. To accomplish these goals the participants will be involved in role playing, problem solving, group team activities, employing case analysis, and being exposed to current research findings on organizational behavior. The size of the group is limited to twenty.

Objectives: On completion of this seminar, each participant will have: • An increased understanding of human behavior typically found in organizations • A heightened awareness of his own motivations and attitudes • The knowledge to improve his personal effectiveness within his organization • The ability to improve his organizational effectiveness • A continuing desire for self-improvement

Schedule: Classes will meet Monday through Friday, 9:15 to 5:00 p.m.

Courses will be held:

Fall: October 13-17, 1969

Winter: January 26-30, 1970

Spring: April 6-10, 1970

Nominations due:

September 22, 1969

January 5, 1970

March 16, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Seminar Director: Charles F. (Chuck) Austin, nationally recognized executive development consultant. Author of the current award winning book, **Management's Self-Inflicted Wounds—A Formula for Executive Self-Analysis.**

Dr. Austin is a former successful executive, has a doctorate in Business Administration from Harvard, and an incisive observer of present executive practices. He is highly skilled in working in seminar situations with executive and management people. In this role, he draws upon a wide range of experience gained from his consulting activities with government, industry, and military. He is widely acclaimed as an exciting, dramatic, and authoritative seminar leader.

Course Fee: \$195.00, payable in advance. Fee includes text books and class material. Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D6-17 Advanced Management Seminar

Dr. Willis C. Schaefer

A five-day seminar on management systems for executives with broad program responsibilities.

Description: This seminar is designed to provide insight into the systems approach to management and program coordination. It will present the systems concept as a means for developing a multi-discipline team approach to problem-solving and its application to management information systems.

The instructor is Dr. Willis C. Schaefer with the Department of State's Center for International Systems Research.

Objectives: The Executive upon completion of this seminar will have: • A working familiarity with the systems approach for meeting organizational objectives • A new insight into their roles as managers and • A feeling of increased responsibility for developing the systems approach to management within their agencies.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Schedule: Classes will meet Monday through Friday, 9:00 to 5:00.

Courses will be held:

Fall: October 6-10, 1969

Spring: April 20-24, 1970

Nominations due:

September 15, 1969

March 30, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington, D. C.

Course Fee: \$175.00 payable in advance. Fee includes text books and class material.

D6-22 Seminar for Women Executives

Helen Dudley

A three-day seminar to provide professional women with an opportunity to look for further ways to achieve their full potential in areas "programed by men."

Description: One of the significant developments in the continuing emancipation of women in our society has been the "arrival" of the woman executive as a professional manager. However, women who aspire to realize their full potential for making contributions as executives still find a thorny path to follow. This highly praised seminar will provide participants an opportunity to discuss pertinent issues with authoritative resource people and, in the process, develop new insights into their own quest for making greater contributions and achieving self-actualization.

The seminar is headed by Helen Dudley, Senior Projects Officer, Office of Civilian Personnel, Department of the Army.

Typical resources have included Congresswoman Martha Griffiths from Michigan, Dr. Priscilla Ransohoff, noted Educational Advisor, and Behavioral Scientist, Sister Margaret Gorman.

Objectives: On completion of this seminar, participants will have: • An increased comprehension of, and confidence in, their potential for making unique contributions to management • More courage to seek the "free ground" of mutual respect and partnership where both men and women can make their greatest contributions.

Schedule: Classes will meet 9:00 to 5:00, Wednesday through Friday.

Courses will be held:

Fall: September 24-26, 1969

October 29-31, 1969

Spring: March 11-13, 1970

May 6-8, 1970

Nominations due:

September 1, 1969

October 6, 1969

February 9, 1970

April 13, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Course Fee: \$125.00 payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D3-718 ADP for Executives

(See p. 36)

D6-100(FE) Management Development Program for Government Executives

An 80-hour program of in-town sessions and an out-of-town wokshop for executives who have had little formal training in current management concepts and practices.

Description: This program is designed especially for the officials who are in executive positions or for those who anticipate assignments involving management responsibility. The program will be especially profitable to executives who have had little formal training in current management concepts and practices.

The emphasis of the program usually includes: the establishment and use of performance objectives, group dynamics and inter-personal relationships, human relations, motivation, communications, delegation, organization, supervision, managerial styles, planning, controlling, coaching, decision-making, role-playing, effective use of time and committees and case study writing and analysis. Opportunity is provided for small group exchanges of experience and problem solving discussions. **This program provides a cornerstone for the continuing self-development of the government executive.**

University, government, business and industrial authorities are used as resources. Some of these experts in teaching managerial concepts have recently included Dr. William Van Dersal, author of the book, **The Successful Supervisor**, and the television series, **Success in Supervision**; William Oncken of Oncken Associates, New York City, noted management consultant for business and government; Dr. Jerry Harvey of National Training Laboratories; Dr. Lee Buchanan, Medical Director for the Department of Agriculture; Dr. Nathan Baily, Dean of the School of Business Administration at American University; Dr. Marshall Dimock,

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

famed administrator, Dean and teacher of Public Administration; Dr. "Chuck" Austin, author of **Management's Self-Inflicted Wounds**; Robert Stockment of Small Business Administration; and James Bostain, of the Foreign Service Institute and winner of two educational television "Emmy" awards.

Objectives: This program is designed to help the participant: • Examine the managerial aspects of his job • Formulate for himself a framework of managerial theory • Explore ways to improve managerial practice in the day-to-day work situation • Strengthen his problem-solving and team action skills and • Formulate a continuing and systematic program of self-development in management.

Schedule: The program is conducted in three phases, extending over several months. The first is a two-day diagnostic and planning meeting in Washington. During this time, needs of the participants are identified and analyzed. **The second phase, at the Americana Hotel, Virginia Beach, Virginia or Williamsburg, Virginia, is an intensive six-day workshop, tailored to the needs of those attending.** The program concludes with a two-day follow-up session in Washington, where members assess the practical application of ideas gained from the program.

Forty-Second Program

November 6 and 7, 1969

December 7-12, 1969

January 8 and 9, 1970

Nominations Due: October 13, 1969

Forty-Third Program

December 4 and 5, 1969

January 18-23, 1970

February 19 and 20, 1970

Nominations Due: November 17, 1969

Forty-Fourth Program

February 12 and 13, 1970

March 1-6, 1970

April 2 and 3, 1970

Nominations Due: January 19, 1970

Nominations accepted after due date if class space is available.

Washington classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Qualifications: This program is designed for men and women in executive and managerial positions at the GS-14 (or equivalent) level and above. Managers at the GS-13 level will be considered. In so far as possible, participants are selected to insure a wide cross-section of Federal agencies.

Course Fee: \$450.00, payable in advance. Fee includes text books and class material. Travel and per diem are in addition.

Nominations for this course may be made by using the nomination form format given on the inside back cover of this bulletin.

D6-100(S&E) Management Program for Executives in Scientific and Engineering Organizations

A program of in-town sessions and an out-of-town workshop focusing on the special management problems confronting executives in engineering and scientific organizations.

Description: Managers of scientific and engineering programs are challenged as never before to organize and operate their programs so that the scientists and engineers on their staffs may fully develop and use their creative abilities. Supervision within these fields has become a major area of concern. This program focuses specifically on those management problems faced by executives in scientific and engineering organizations.

Participants are involved in planning and developing their own workshop program within the framework of established objectives. The emphasis of the program usually includes: the establishment and use of performance objectives, group dynamics and inter-personal relations, human relations, motivation, communications, delegation, organization, supervision, managerial styles, planning, controlling, coaching, decision-making, role playing, effective use of time and committees and case study writing and analysis. Opportunity is provided for small group exchanges of experience and problem solving discussions. This program provides a cornerstone for the continuing self-development of the government executive. For maximum learning, participation in this program should be on a voluntary basis.

University, government, business and industrial authorities are used as resources. Some of these experts in teaching managerial concepts have recently included Dr. William Van Dersal, author of the book **The Successful Supervisor** and the television series **Success in Supervision**; William Oncken of Oncken Associates, New York City, noted management consultant for business and government; Dr. Jerry Harvey of National Training Laboratories; Dr. Lee Buchanan, Medical Director for the Department of Agriculture; Nathan Bailly, Dean of the School of Business Administration at American University; Dr. Marshall Dimock, famed

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administrator, Dean and teacher of Public Administration; Robert Stockment of Small Business Administration; and James Bostain, of the Foreign Service Institute and winner of two educational television "Emmy" awards; and Dr. Charles F. Austin, Consultant in Executive Development and author of award winning **Management's Self-Inflicted Wounds—A Formula for Executive Self-Analysis**.

Objectives: This program is designed to help the participant from a scientific or engineering organization: • Examine the managerial aspects of his job • Formulate for himself a framework of managerial theory • Explore ways to improve managerial practice in the day-to-day work situation • Strengthen his problem solving and team action skills • Formulate a continuing and systematic program of self-development in management.

Schedule: The program is conducted in three phases, extending over several months. The first is a two-day diagnostic and planning meeting in Washington. During this time, needs of the participants are identified and analyzed. **Williamsburg, Virginia, is the site of the second phase, an intensive six-day workshop, tailored to the needs of those attending.** The program concludes with a two-day follow-up session in Washington, where attention is given to assessing the practical application of ideas gained from the program.

Sixteenth Program

September 25 and 26, 1969

October 19-24, 1969

December 11 and 12, 1969

Nominations due: September 8, 1969

Seventeenth Program

November 13 and 14, 1969

January 4-9, 1970

February 9 and 10, 1970

Nominations due: October 20, 1969

Eighteenth Program

January 12 and 13, 1970

February 15-20, 1970

March 26 and 27, 1970

Nominations due: December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: This program is designed for men and women in executive and managerial positions at the GS-14 (or equivalent) level and above. Managers at the GS-13 level will be considered. In so far as possible, participants are selected to insure a wide cross-section of Federal agencies.

Course Fee: \$450.00, payable in advance. Fee includes text books and class material. Travel and per diem are in addition.

D3-013 Statistical Methods for Executives

(See p. 41)

D6-29 Managing Management Time

William Oncken, Jr.

Description: Managers typically run out of time before they run out of any other resource. This is partly because time cannot be stockpiled and partly because managers control so little of what they do have. Their time is imposed upon by superiors, equals, and subordinates in ways and at times defying all attempts at effective control. Yet if the manager is to succeed, he must control it. Mr. Oncken (widely acclaimed as an exciting, dramatic, and authoritative seminar leader) will explore in depth the methods that successful managers at all levels—from supervisor to assistant secretary—use to control time effectively. This program is open to government and non-government personnel.

Objectives: At the conclusion of this seminar each participant will be better able to: • Organize his time to meet higher management's requirements, the immediate requirements of the rest of the organization, and his own requirements in becoming a more effective administrator • Understand the uniquely different activities to which the manager should devote his time • Help those with whom he works to "gear" time to objectives and priorities of organizational need.

Qualifications: Participation will benefit federal executives, managers, and supervisors from GS-9 through 18.

Schedule: Classes will meet 9:00 a.m. to 4:30 p.m. for two days on the following dates:

Fourth Program: September 8-9, 1969

Nominations due: August 19, 1969

Fifth Program: November 20-21, 1969

Nominations due: October 31, 1969

Sixth Program: April 9-10, 1970

Nominations due: March 19, 1970

Seventh Program: June 4-5, 1970

Nominations due: May 14, 1970

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Tuition: Cost per person is \$125.00. The fee includes all study materials and "The Cube."

Nominations for this course may be made by using the nominations form format given on the inside back cover of this bulletin. For further information please call Mr. Dee W. Henderson on Code 111 (388) 3247.

D6-757 The Art of Delegation

Dr. Nathaniel Stewart

Description: If a manager's workload persists in being heavy, if he cannot comfortably meet deadlines, and if he lacks time for planning and high priorities—he may be wise to re-examine his delegation approach. A greater delegation competence may relieve these managerial burdens.

This workshop begins with recognizing delegation as an indicator of managerial strength—strength in the framework of planning, decision-making, and exploring new approaches to problems which require more probing, depth, and analysis. It proceeds to a consideration of the nature and climate of delegation and the essentials of sound delegation.

Skills, attitudes, climate, relationships, and techniques are considered in this clinical look at the manager as a delegator.

Objectives: This course will enable the participant to: • Understand the importance of effective delegation in his own position • Develop a more conducive climate within his organization for productive delegation • Develop his own competence as a delegator from an objective analysis of his present effectiveness • Delegate more effectively.

Schedule: The acceptance for this workshop will be limited to a total of 20 participants.

Course will be held:

Fall: October 6 and 7, 1969

Spring: April 13-14, 1970

Nominations due:

September 15, 1969

March 23, 1970

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Workshop Leadership: Dr. Nathaniel Stewart has had extensive experience in the management training programs of the Federal Government, General Motors Corporation, Bendix, Electric Council of New England, Martin Company, GEICO Inc., and other companies. He has conducted such workshops on the art of delegation repeatedly for top and middle management groups. Dr. Stewart is a member of the Academy of Management, a featured management writer for *Nation's Business* and author of *Strategies of Managing for Results*.

Course Fee: \$135.00, including tuition and all workshop materials.

D6-100(FM) Management Development Program for Government Managers

An 80-hour program of in-town sessions and an out-of-town workshop for managers in the GS grades 12 and 13 level, or equivalent.

Description: This program is designed for officials with management responsibilities, or who anticipate managerial assignments. The program should be of especial value to those with little formal training in the concepts and practices of management as an emerging, separate profession.

Earnings participants can anticipate include: building teamwork; conflict resolution; sharpening their perception of individual and supervisory behavior; gaining insights into the process of groups and group problem-solving; measuring and obtaining achievement of organizational objectives; and understanding current theories of management, communications, and motivation.

Objectives: This program is designed to help the participant: • Examine the managerial aspects of his job • Formulate for himself a framework of managerial theory • Explore ways to improve managerial practice in the day-to-day work situation • Strengthen his problem solving and team action skills • Formulate a continuing and systematic program of self-development in management.

Schedule: This program is conducted in three phases, extending over several months. The first is a two-day diagnostic and planning meeting in Washington. **Williamsburg, Virginia, is the site of the second phase, an intensive six-day workshop.** The program concludes with a two-day follow-up session in Washington, where members assess the practical application of ideas gained from the program.

Second program:

Phase I—October 16 and 17, 1969

Phase II—November 16-21, 1969

Phase III—December 18 and 19, 1969

Nominations due: September 22, 1969

Nominations accepted after due date if class space is available.

Washington classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

For further information please call Mr. Dee W. Henderson on Code 111 (388) 3247.

Qualifications: This program is designed for men and women in managerial positions at the GS-12 and 13 (or equivalent) levels. Managers at the GS-11 level will be considered. In so far as possible, participants are selected to insure a wide cross-section of Federal agencies.

Course Fee: \$450.00, payable in advance. Fee includes text books and class material. Travel and per diem are in addition.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D3-714 Introduction to Planning, Programing, and Budgting (PPB)

(See p. 41)

D3-761 PPB Cost Studies and Cost Effectiveness Analyses

(See p. 42)

D6-19 Managing for Results

Robert Stockment

A three day seminar to introduce program and staff managers to a managerial tool which will improve communication and unleash potential of individual members of the team while increasing overall team activities.

Description: Managers have been trying for years to improve ways for motivating, communicating and rewarding employees according to the work they do. Motivation and communication type training programs have often failed because managers could not bridge the gap between the training and the real job where their people work. We have just begun to understand that we do not motivate people but rather people motivate themselves if the job they are in provides the incentive for increased motivation. In brief, the job provides the means for unleashing individual motivation. This seminar will deal with the "how" to bring this about. The seminar will provide a skill for managers at any level of the organization that will simplify getting individuals on the team to accept responsibility and accountability for the work they perform. More importantly, through more objective performance appraisals, this tool will improve understanding between individual team members and contribute to their personal growth and development on the job.

The instructor is Robert Stockment, Chief, Training Division, Small Business Administration, formerly Director of Programs, American Management Association.

Objectives: On completion of this seminar, each manager will be able to: • Design work objectives that provide motivational payoffs for himself and his subordinates' jobs • Write realistic standards of performance statements for measuring work objectives completed • Play a more prominent role in the coaching, counseling and development of individual members of his team.

Schedule: Classes meet Monday, Tuesday, and Wednesday, 9:00 a.m. to 5:00 p.m.

Courses will be held:

September 22-24, 1969

May 4-6, 1970

Nominations due:

September 2, 1969

April 13, 1970

Nominations accepted after due date if class space is available. Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Course Fee: \$95.00, payable in advance. Fee includes text books and class material.

D3-747 ADP Installation Management

(See p. 38)

D3-722 Human Factors in Data Processing

(See p. 40)

D4-17 Dictation for Managers

Jane Glennie

A contemporary approach for dictating more efficiently and effectively.

Description: This one-day course is a practical and comprehensive approach to help the executive or supervisor solve daily problems of dictating official letters and reports either to a secretary or into a dictating machine. The course emphasizes the psychological principles and the effective techniques basic to efficient dictation. This program is open to both government and non-government managers.

The executive is taught by lecture and demonstration how to conduct himself during dictation periods. Each individual will have time to experiment with these principles and techniques

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

under the supervision of the instructor. The objective of this course is to enable the executive to become a "real dictator!"

The instructor is Mrs. Jane Glennie, Communications Consultant. Taught at Indiana and George Washington.

Objectives: This program will enable the participant to: • Use a basic method of dictation which he can modify to his own personality, needs and circumstances • Establish a more effective writing style • Continually improve his dictation effectiveness by applying the principles of this seminar, and • Write a "good" letter the first try.

Schedule: Classes will be held on the following dates from 9:00 to 5:00 p.m.:

Nominations Due: Three weeks before course begins.

July 2, 1969	November 26, 1969	March 19, 1970
August 13, 1969	December 17, 1969	April 15, 1970
September 17, 1969	January 14, 1970	May 13, 1970
October 8, 1969	February 11, 1970	June 17, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington, D.C.

Course Fee: \$50.00, payable in advance. Fee includes text books and class material.

DP6-6 Effective Management Practices

Henry Herrell

Description: With the use of professional guidance and the Auto-Tutor machine, this course is designed to introduce the manager to the newer concepts of managerial sciences as well as to improve his skills through review of time-tested techniques in effective management. It provides excellent training for new supervisors and middle-level managers as well as for trainees aspiring to management positions.

Schedule: Classes will be scheduled for Monday, Wednesday, and Friday or Tuesday and Thursday at the following times:

Section A: 9:00-10:30	Section D: 2:00-3:30
Section B: 10:30-12:00	Section E: 3:30-5:00
Section C: 12:30- 2:00	

Example: Mr. John Doe; Monday, Wednesday, and Friday, 10:30-12:00.

Jane Smith: Tuesday and Thursday, 2:00-3:30.

After nomination has been received, schedules will be made by the Program Coordinator and the nominee for the most suitable time. Indicate your preference of section and days, from the information above, on the nomination form.

Courses will be held:

October 6, 1969-January 9, 1970
February 2-April 24, 1970
May 4-July 24, 1970

Nominations due:

September 15, 1969
January 19, 1970
April 13, 1970

Course Fee: \$115.00 for the complete program. Tuition includes consultation sessions with the special instructor, Mr. Henry Herrell.

D3-533 Introduction to Operations Research

(See p. 37)

D6-12 Management Problem-Solving Discussion Skills

A Modern Developmental Program for Managers and Supervisors

Description: How do you handle office problems? This three-day program is an educational system designed to provide the participant with critical and necessary skills in problem-solving methods through individual and group interaction. Managers and supervisors on all levels of the management team realize the importance of having at their disposal skills and techniques to meet problem-solving situations as they occur.

Designed to reach all managers and supervisors regardless of function or level, the program's approach is basically where interaction takes place not on the same level, but on the level of superior to subordinate.

Objectives: Upon completion of this program the participant will be better able to: • Use critical problem-solving skills and techniques on the job • More effectively work with his or her staff in problem-solving situations • Strengthen their relationships with staff members and subordinates • Effectively utilize the creativity and resourcefulness of their staff in accomplishing the goals of their organization

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Schedule: Classes will be held for three full days from 9:30 a.m. to 4:30 p.m.

Courses will be held:

October 29-31, 1969
January 12-14, 1970
May 4-6, 1970
May 18-20, 1970

Nominations due:

October 20, 1969
December 15, 1969
April 13, 1970
April 29, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington, D.C.

Course Fee: \$150.00, payable in advance. Fee includes text books and class materials.

D6-92 Management Seminar for Attorneys

A developmental program for executives who have legal training but little formal training in management.

Description: This program is designed for attorneys with management responsibilities. Participants will be exposed to case studies calling for utilization of management tools and administrative techniques for resolution. Emphasis will be placed upon effective use of legal training in the management profession.

Communication abilities, goal setting, program development, and employee motivation techniques should be enhanced as a result of participation in this program.

University, Government, business and industrial authorities familiar with the attorney's role in management will be used as resources. The program will be team coordinated by Dr. Raymond F. Pelissier (management consultant and former Director of Business School at Georgetown University) and Robert N. Katz (recent Solicitor for the Federal Maritime Commission and presently Professor at the University of California).

Objectives: This program is designed to help the attorney: • Cross fertilize ideas with other lawyers in top management posts concerning the strengths and problems facing lawyers in management positions • Review and become more aware of the principles of management • Understand and use recent concepts of management now achieving wide acceptance in many organizations • Explore new ways of improving their managerial practices • Formulate for himself a continuing and systematic program of self-development in management.

Schedule: Classes meet for three days, Monday through Wednesday, 9:00 a.m.-5:00 p.m.

Courses will be held:

September 22-24, 1969
March 23-25, 1970

Nominations due:

September 1, 1969
March 2, 1970

Nominations accepted after due date if class space is available.

Location: Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Qualifications: This program is designed for men and women with legal backgrounds in executive and managerial position at the GS 13-14 (or equivalent) level and above. Managers at the GS-12 level will be considered. As much as possible, participants are selected to insure a wide cross-section of Federal agencies.

Course Fee: \$125.00, includes tuition, notebooks and all materials.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D6-24 Management Seminar for Government Economists

Dr. Jack Carlson

A three-day seminar to explore the broadened range of economic problems which must be dealt with by the government economist.

Description: This seminar will examine in depth some of the problems which face the government economist and tend to limit his effectiveness as a professional person. Among the problems to be discussed are: identifying and analyzing the problems in using available data; identifying and analyzing the relationship of the economist to staff members of other disciplines; and identifying and analyzing the relationship of the economist to his superiors in the decision-making process.

The instructor is Dr. Jack Carlson, Assistant Director, Bureau of the Budget.

Objectives: On completion of this seminar, participants will have: • New insights into their relationships with peers in other disciplines and with agency decision-makers • An ability to see some continuing problems in a new perspective.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Schedule: Classes will meet Monday through Wednesday, 9:00 to 5:00.

Courses will be held:

November 17-19, 1969

May 25-27, 1970

Nominations due:

October 27, 1969

May 4, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Course Fee: \$145.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D6-23 Managing Human Resources in Organizations

Leonard Pouliot

A Seminar on Personnel Management.

A three-day seminar in which new dimensions of human science will be explored.

Description: This seminar is designed to take a look at ways in which personnel programs can be modified to become more responsive to agency needs—by getting the personnel manager into the operating section as an in-house consultant to line managers. This will include discussions of labor-management relations and the personnel office's responsibility in helping line managers cope with a changing labor market. Along the same line, discussion will center around helping managers formalize their expectations of subordinates in a manner which will create more effective and productive employee appraisals.

The instructor and coordinator will be Leonard Pouliot, Director of Personnel, Smithsonian Institution; President of the American Society for Training Development (1969).

Objectives: On completion of this seminar, participants will be able to: • See the potential for broader cooperation with line managers within their agencies • Formulate a plan for their self-development to meet the expectations that new personnel functions will create.

Schedule: Classes will meet 9:00 a.m. to 5:00 p.m., Monday through Wednesday.

Courses will be held:

October 20-22, 1969

March 30-April 1, 1970

Nominations due:

September 29, 1969

March 9, 1970

Nominations accepted after due date if class space is available.

Class will be held at the National Press Building, 529 Fourteenth St., N.W., Washington, D.C.

Course Fee: \$125.00, payable in advance. Fee includes text books and class material.

D6-304 Operational Problems in Personnel Management

Claude R. Wright

Description: A unique course designed with top resource consultants in different areas to develop knowledge and skills in personnel management. It is appropriate for employees beginning personnel work and it will enlarge and further develop the skills of those employees already in the area of personnel management. Instructors will be successful personnel officers with a wide range of experience and capability in discussing the many and varied problems that arise in the personnel area. The course will qualify as two credit hours in the regular course work of the Graduate School. Class space will be limited.

Objectives: This program is designed to help the participant: • Develop within a broad area of subject matter appropriate to the profession of personnel work • Share experiences and the application of policy in a wide range of situations • Obtain a better understanding of basic policy, rules and regulations that guide personnel action.

Schedule: Classes meet Tuesday afternoons for 16 weeks from 4:30 to 6:20 p.m. in Conference Room B-243, Interior Building between 18th and 19th and C and D Streets, Washington, D.C.

Courses will be held:

September 30, 1969-January 27, 1970

February 3, 1970-May 19, 1970

Nominations due:

September 8, 1969

January 9, 1970

Nominations accepted after due date if class space is available.

Course Fee: \$95.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside cover back page of this bulletin.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

D6-3 Space Management: Planning and Program Development Seminar

Mackey White

A three-day seminar to review and discuss the basic disciplines and requirements of a comprehensive space management program.

Description: This is a three-day program for experienced Space Management Officers (GS 11-15). It is designed to review basic principles of Space Management; to evaluate problems of lead time in space acquisition or renovation; to review standards and layout concepts; to discuss application of these principles to long range plans, major program changes and re-organizations and to learn recent developments concerning the effects of office environment on employee efficiency.

Objectives: When participants have completed the course they should be better able to:
• Create and operate an effective space management program • Develop and execute long range plans for space use.

Seminar Leadership: The seminar has been planned and will be under the direction of Mackey W. White, AIA, B.S. (Architecture) Tulane University, assisted by Gerald S. Radley, Associate, Washington Metropolitan Chapter, AIA. Mr. White was responsible for building construction, real estate and space management in the U.S. Department of Agriculture from 1943 to 1968. Mr. Radley served as director of various divisions and staff offices in the Office of Space Management, G.S.A. from 1949 to 1969.

These instructors will be assisted as required by a panel of working architects, engineers and professional space managers of Agriculture, Defense, H.U.D., G.S.A., Treasury and other government agencies. Some of these instructors include: Edward W. Brooks, Chief Property Division, Office of Administrative Services, Treasury Department and Melvin P. Hemmer, Deputy Director, Planning and Utilization Division, Office of Space Management, G.S.A.

Schedule: Daily 9:00 a.m. to 5:00 p.m. on:

October 22-24, 1969
February 11-13, 1970
April 22-24, 1970

Nominations due:
September 29, 1969
January 29, 1970
March 30, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington D. C.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D4-3 The Supervisor

A foundation program for the future manager and executive.

6 credits

Description: No one has time in this fast-moving decade to read, examine or become aware of (let alone apply) all the current literature and research on becoming an effective supervisor. This 80-hour multi-media educational program is designed to give the broadest and yet most thorough exposure and opportunity for the application of proven supervisory and management techniques. It is conducted in two separate phases over a period of about six weeks. The first phase is one week of intensive exposure to current supervisory skills. The participant returns to the job for a period to apply and assimilate the first phase learning. The second phase reinforces the learnings of the first week and the problems associated with attempts to apply what was learned during phase one. Methods of learning will range from audio and visual media to group dynamics and self-learning modules. For those in the Federal Service, this program fulfills the Civil Service Commission's new supervisory training requirements.

Objectives: At the conclusion of this program the participant should have a better understanding of: • Basic principles of supervision and management • Current concepts of organization • Responsibilities of the supervisor • Key personnel policies and procedures • Work planning and productivity • Performance appraisal and evaluation techniques • Problem-solving and decision-making processes • Communicative processes in management • Learning theory and modern training techniques important to the supervisor • Human behavior and interpersonal relationships important to the supervisor.

Schedule: Classes will meet daily from 9:00 a.m. to 5:00 p.m. on:

1st Program

Phase I — September 15-19, 1969

Phase II — October 27-31, 1969

Nominations due: August 20, 1969

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

2d Program

Phase I — September 29-October 3, 1969

Phase II — December 8-12, 1969

Nominations due: August 28, 1969

3d Program

Phase I — February 2-6, 1970

Phase II — March 16-20, 1970

Nominations due: January 11, 1970

4th Program

Phase I — April 6-10, 1970

Phase II — May 18-22, 1970

Nominations due: March 13, 1970

Nominations will be limited to 25.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington D. C.

Course Fee: \$295.00, payable in advance. Fee includes text books and class material.
\$195.00 if Phase I only is taken.

D4-4 Success in Supervision

Dr. William R. VanDersal

A three-day course that provides a base for achievement in supervision.

Description: A special introduction to modern supervisory theory and practice intended primarily for potential supervisors or beginning supervisors with a year or less of supervisory experience. This course will emphasize working with people, basic principles of supervision, participation, motivation, communication, training, organization, planning and special problems.

The instructor, William R. VanDersal, is the author of the widely used and acclaimed book **The Successful Supervisor**, and the national educational television program "Success in Supervision." This course is a concentrated design of his twelve-week television program.

Objectives: Successful completion of this course will enable the student to: • Know what successful supervision is in any organization • Understand the key principles of successful supervision • Apply techniques to increase the interest, enthusiasm, and productivity of the people being supervised • Analyze and approach objectively the problems in human relations that a supervisor encounters, and • Appreciate the important part every supervisor plays in the success of his organization.

Schedule: Classes will meet 9:15 a.m. to 5:00 p.m.

Courses will be held:

October 20-22, 1969 (fall)

May 4-6, 1970 (spring)

Nominations due:

September 29, 1969

April 13, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth St., N.W., Washington D. C.

Course Fee: \$150.00, payable in advance. Fee includes text books and class material.

D4-109 Supervision and the Administrative Process

Claude R. Wright

Description: A systematic design in which top teachers successfully develop knowledge and skills in the techniques of supervision as related to the administrative process. It is appropriate for first line supervisors or those employees anticipating assignment to duties requiring supervisory capability. It is also appropriate for administrative assistants and other administrative personnel who have a need for understanding the administrative process and who have contact with "People Problems" in their everyday work schedule. This 32-hour program emphasizes supervisory responsibilities, concepts of organization, work planning and productivity, personnel and principles of supervision.

Objectives: Upon completion of this course the participant will be better able to: • Use effective supervisory techniques in manpower utilization • Understand the federal administrative process and its relation to supervision • Develop a program of self development as a supervisor.

Schedule: Classes meet Wednesday afternoons for 16 weeks from 4:30 to 6:20 p.m. in Conference Room B-243, Interior Building between 18th and 19th and C and D Streets, Washington, D.C.

Courses will be held:

October 1, 1969-January 28, 1970

February 4, 1970-May 20, 1970

Nominations due:

September 8, 1969

January 12, 1970

Nominations accepted after due date if class space is available.

For further information call Mr. Dee W. Henderson, code 111 (388) 3247 or Claude R. Wright, code 183 (343) 5086.

Course Fee: \$95.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D4-5 Introduction to Supervision and Management

Bertram Strauss

An introductory course for supervisors with limited training in supervision and management and for employees about to assume supervisory responsibilities.

Description: Many people begin their first supervisory jobs without understanding the requirements for effectiveness. The attitudes and skills involved in working individually may need to be modified in order that those needed in supervising others may be developed.

This course is designed for the new supervisor or person under consideration for a supervisory position. Its primary purpose is to enable the supervisor to acquire the management skills and knowledge needed to carry out his supervisory responsibilities. Emphasis is on learning, communications, problem solving, decision making, performance appraisal and human behavior and interpersonal relations.

Objectives: This course is aimed at helping the individual: • Become acquainted with literature in the field • Understand modern concepts of supervision and management • Formulate for himself a sound approach to management • Analyze and solve supervisory and managerial problems

Schedule: Classes meet Monday through Friday, 9:00-12:30 p.m.

Courses will be held:

October 6-10, 1969
February 16-20, 1970

Nominations due:

September 15, 1969
January 26, 1970

Nominations accepted after due date if class space is available.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Qualifications: Participation in this course is open to anyone without formal training in supervision and management. The program is designed for those within GS-7 to GS-13 grade level. Consideration will be given applicants below GS-7 who are being considered for supervisory positions and whose agencies recommend attendance.

Course Fee: \$135.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D6-18 Effective Supervisory Leadership

Henry G. Herrell

A comprehensive seminar in supervisory practices for experienced supervisors who want to become more effective in their jobs yet cannot spend much time away from the office.

Description: This seminar is designed to provide current supervisors with the latest proven techniques and approaches to solving "people problems" and in planning, organizing, and completing on-schedule assignments which are part of overall program objectives. Changing management concepts, technology, and the composition of the work force demand that supervisors remain current with leadership practices which result in more effective supervision. This seminar is for GS grades 9 through 13.

Objectives: This program is designed to help the participant: • Identify and analyze the various supervisory aspects of his job • Explore new ways of improving supervisory practice in the day to day work situation • Acquaint himself with supervisory literature through which he may remain currently informed of better supervisory practices • Insure his continuing success by better understanding the modern supervisory leadership goal which is to create the atmosphere where subordinates can unleash their highest creativity, cooperation, commitment and performance.

Schedule: The Supervisory Leadership course will be held for a total of eighteen hours. It will meet for three weeks each Tuesday and Thursday during the following days:

Courses will be held:

June 10-26, 1969, 9:00 a.m.-12:30 Noon
September 9-25, 1969, 9:00 a.m.-12:30 Noon
October 7-23, 1969, 1:00-4:30 p.m.
November 4-25, 1969, 1:00 p.m.-4:30 p.m.

February 3-19, 1970, 9:00 a.m.-12:30 Noon
March 10-26, 1970, 1:00 p.m.-4:30 p.m.
April 14-30, 1970, 9:00 a.m.-12:30 Noon
May 7-26, 1970, 1:00 p.m.-4:30 p.m.

Nominations due: Three weeks before beginning date.

Nominations accepted after due date if class space is available.

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

Location: Classes will be held in the National Press Building, 529 Fourteenth Street, N.W., Washington, D. C.

Course Fee: Cost per person is \$95.00. Tuition includes all class materials.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D4-25 Space Management: Office Layout Workshop

(See p. 54)

D4-15 Executive Secretarial Seminar

(See p. 53)

Curriculum in the Computer and Management Sciences

The purpose of the Curriculum in the Computer and Management Sciences described in this catalog is to provide special training for government employees and others to meet the particular needs of individual offices, agencies, or departments.

Committee on Computer and Management Sciences

CHARLES F. KIEFER, *Civil Aeronautics Board, Chairman*

B. G. ANDERSON, *Office of ADP Management, Post Office*

LANCELOT W. ARMSTRONG, *Internal Revenue Service, Treasury*

GARY D. BEARDEN, *Financial Systems Corporation*

HILDA CALLAWAY, *Atomic Energy Commission*

JOSEPH CUNNINGHAM, *Bureau of the Budget*

EDMUND DWYER, *General Services Administration*

EZRA GLASER, *National Institutes of Health, HEW*

H. R. J. GROSCH, *National Bureau of Standards, Commerce*

WALTER HAHN, *Environmental Science Services Administration, Commerce*

JOSEPH HASPRAY, *Farmers Home Administration, USDA*

W. HENRY HILL, *Department of the Navy, DOD*

HOWARD W. HJORT, *Planning Evaluation and Programming Staff, USDA*

BRUCE W. KELLY, *Statistical Reporting Service, USDA*

NATHANIEL MACON, *Leasco Systems and Research Corporation*

NORMAN REAM, *Department of the Navy, DOD*

NICHOLAS F. SCHAUER, *Department of Treasury*

D4-105 Basic Concepts of Data Processing

3 credits

William J. Cassidy, Charles Gene Lokey, Wallace F. Velander

A series of ten seminars covering the basic concepts of data processing.

Description: This is an introductory course in data processing designed for those persons with no previous experience in this field.

Included in the material to be presented at the seminars are: the History and Development of Data Processing, the fundamentals of Punched Card Data Processing, the fundamentals of Electronic Data Processing (Computers), an introduction to Computer Programing and Systems Design.

Emphasis will be placed on the concepts, terminology, methodology, and career opportunities in data processing.

An aptitude test is given at the close of the course.

Objectives: On completion of this course, the participant will be able to: • Qualify for more advanced courses in data processing • Communicate with the technical personnel in data processing • Appreciate the role and use of data processing equipment • Discover what career opportunities there may be for them in data processing

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 25 students who have a strong interest in automatic data processing. Students must be high school graduates or the equivalent.

Course Fee: \$75.00, payable in advance. Fee includes text books and class material.

D3-113 Advanced Concepts of Data Processing

3 credits

Lawrence J. Howe

A series of ten seminars and workshops covering advanced concepts of data processing.

Description: This is an advanced course in data processing concepts for those students who have completed basic orientation courses and desire to advance themselves in this field.

Included in the material to be presented at the seminars will be an introduction to: Source Data Automation (SDA), Methods and Performance Standards in Data Processing, Systems and Programing Documentation, Problem Analysis, Cost Analysis, Systems and Equipment Evaluation, Human Factors in Data Processing, and Career Opportunities.

Objectives: On completion of this course, the participant will be able to: • Recognize and take advantage of the career opportunities in data processing • Be aware of the general problems and techniques used in Source Data Automation (SDA) • Know the needs and requirements for Systems and Programing documentation • Recognize approaches to problem analysis • Know the fundamentals of cost analysis • Gain insight into the methods and techniques of systems and equipment evaluation • Recognize the human factors in data processing • Be better prepared for more technical courses in data processing

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 25 students. Students must have completed either courses D4-105 or D3-112 or the equivalent.

Course Fee: \$75.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-112 ADP Orientation for Secretaries and Clerks

3 credits

Gregory J. Charouhis

A series of ten seminars and workshops designed specifically for secretaries and clerks.

Description: This is an orientation course to fill the specific needs of secretaries and clerks. With the implementation of more and more automated systems, secretaries and clerks are finding themselves getting involved in data processing. The seminars will present such material as: an introduction and a survey of the various ADP equipment (computer, sorter, card-punch, etc.), fundamentals of data processing, the relationship of ADP to secretarial and clerical functions, ADP printouts, card-punch systems, magnetic tape systems, flow-charts, technical writing and documentation, assignment of secretarial and clerical personnel in ADP, basic ADP concepts, human relations in ADP, and generally what every secretary and clerk should know about ADP.

Objectives: On completion of this course, the participant will be able to: • Interpret punched-card data • Know how ADP equipment works • Make a print lay-out • Draw simple flow charts • Understand basic ADP concepts

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 30 students. Participants are limited to secretarial and clerical personnel who may or may not be directly engaged in ADP activities.

Course Fee: \$75.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made using the nomination form format given on the inside back cover page of this bulletin.

DP3-9 Computers: A Four-Part Course in Programing

(See p. 46)

D3-559 Data Processing (General)

3 credits

Michael H. Gargano

A series of ten seminars and workshops covering Data Processing.

Description: These seminars are intended to be an introductory survey of automatic data processing. Included in the seminars will be numbering and coding systems, logical organization and components of ADP hardware systems, ADP communications concepts, software systems concepts, system analysis, flow charting and programing. Highlights of computer acquisition and management will be considered.

Objectives: • To provide a complete basic understanding of ADP hardware and software • To acquaint the participant with the concepts and vocabulary of ADP • To provide an understanding of systems analysis, flow charting, and programing • To serve as a broad basis for further oriented education in Automatic Data Processing

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed at least two years of undergraduate education or equivalent work experience.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-578 Data Processing, IBM 360

3 credits

Raymond W. Smith

A series of ten lectures, demonstrations, and workshops to introduce the student to the IBM 360 Data Processing System.

Description: This course is a description and evaluation of the IBM 360 Computer System. Data representation schemes; addressing schemes; input/output (devices, control, and application); instruction and command set logic; software operating systems, programming languages, sort-merge; installation and management considerations will be covered from both theoretical and practical viewpoint. This is not a programming course.

Objectives: • To provide a complete basic understanding of the IBM 360 hardware and software • To provide the necessary prerequisites so that the student may continue in further courses toward complete mastery of the IBM 360 • To provide participants who need evaluation criteria and appreciation of the IBM 360 with an in-depth consideration of this system

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed Basic Concepts of Data Processing, D4-105, or have experience in programming a stored digital computer.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-583 Data Processing, Spectra 70

3 credits

Millard A. Anderson

A series of ten seminars and workshops covering electronic data processing using the RCA Spectra 70 computing systems.

Description: The course is designed to cover major aspects of the RCA Spectra 70 hardware, software, and system usage. The seminars include basic equipment, basic software, instruction complements, data manipulation, comparison and branching, address generation, sectioning and linking, I/O simultaneity, file definition, I/O macros and editing. Class problems illustrating programming instruction, operating systems, I/O control and data handling, etc. will be given. The student will design, code, and assemble a project program. Spectra 70 Operating Systems and computer room operations will be introduced.

Objectives: On completion of this course, the participant will be able to: • Write Spectra 70/35-45-55 programs (using the Assembly System and the Tape Operating System) that process general purpose instructions • Control the Spectra 70/35-45-55 computer systems while executing basic operations • Assist other individuals in their organizations in the preparation of user programs

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Nominations due:

September 10, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have Basic Concepts of Data Processing, D4-105, or equivalent.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-543 Data Processing, Burroughs B5500/6500 Systems

3 credits

To be announced

A series of ten seminars for ADP personnel to acquaint them with the Burroughs B5500/6500 Systems.

Description: This course is designed to acquaint the individual with the highly advanced information processing systems of the Burroughs B5500/6500 Systems. It covers the design concepts and software of the Systems.

Objectives: To introduce the individual to: • Automatic control through a full-scale operating system (MCP-Master Control Program) • Multiprocessing of independent programs, with dynamic scheduling by the operating system • Modularity, for expansion without reprogramming • Efficient, effective use of problem oriented languages • Hands-on experience

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Nominations due:

Fall: September 27-December 6, 1969

September 10, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Training in basic concepts of data processing and programing experience desirable.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-303 Operating System (BOS/DOS/TOS) IBM 360

3 credits

Theodore V. Pasko

A series of ten seminars and workshops covering the Basic, Disk, and Tape Operating Systems for the IBM 360.

Description: This course is designed to cover all aspects of the Basic, Disk and Tape Operating Systems. It is intended for programmers and programmer trainees from installations using BOS/DOS/TOS, and for operators desiring a deeper insight into the functions of BOS/DOS/TOS. The seminars will include a discussion of System Service and System Control programs (e.g. the Supervisor, Job Control, Linkage Editor and the Librarian), Sort/Merge, Utilities, Multiprogramming concepts, System Generation, Data Management and Operator Communication. The processing programs such as Assembler, FORTRAN, COBOL, PL/1 and RPG cannot be presented in detail in the time allotted, however, the Job Control language necessary to use them will be covered and demonstrated via assignments and workshops.

Objectives: On completion of this course, the participant will be able to: • Write the necessary Job Control language to execute the processing programs under BOS/DOS/TOS • Code the Assembler language macro instructions necessary to utilize the Data Management and IOCS facilities of BOS/DOS/TOS • Use the Utility programs to perform any of the utility functions • Understand the error messages and interpret the output received from BOS/DOS/TOS • Assist others in their organizations in using BOS/DOS/TOS

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Nominations due:

Fall: September 27-December 6, 1969

September 10, 1969

Winter: January 10-March 21, 1970

December 15, 1969

Spring: April 11-June 20, 1970

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a knowledge of the concepts of System/360. Experience with System/360 Assembly language or a higher level language is desirable. Experience with a programing system or monitor on a previous system is also desirable.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-321 Operating System (OS) IBM 360

3 credits

James W. Sullivan

This course is a series of ten seminars and workshops covering IBM Operating System/360.

Description: This course is designed to cover the concepts and facilities of Operating System/360. The seminars will include detailed descriptions of the Control Program, Data Management, Job Control Language, and Utilities with practical application of these subjects. Computer workshops will be provided to demonstrate the facilities discussed in the seminars as well as system operation and operator communication. The language translators such as FORTRAN, COBOL, PL/1, and Assembler will not be presented in detail, but their use under the Operating System will be covered. The multiprogramming facilities of the Operating System will also be discussed in detail.

Objectives: On completion of this course, the participant will be able to: • Understand the concept and operation of the Operating System • Utilize the facilities through the Job Control Language and utilities of the System • Understand and interpret the output of the Operating System • Assist other individuals in the use of Operating System/360

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a knowledge of the concepts of System/360. Experience with System/360 Assembly Language or a higher level language is desirable. Experience with a programming system or monitor on a previous system is also desirable.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-304 Operator's Training IBM 360

3 credits

Max R. Miller

This course is a series of ten seminars and workshops covering the operation of the IBM 360.

Description: This course is designed to cover the operation of the IBM 360. Included in the seminars will be the hexadecimal and binary numbering systems, loading of programs, displaying and altering of core storage, setting of sense switches and assigning of tape units. All aspects of operating the IBM 360 in 1401/1460 compatibility mode will be covered.

Included also will be an introduction to the operating system (OS) initial program loading (IPL), basic job control language (JCL), job streaming, messages to and replies by the operator. Operation of the IBM 360 in a multiprogramming environment will be covered. Procedures for altering and displaying main storage and registers will be discussed.

IBM 360 Model 40 will be used in the workshop sessions.

Objectives: On completion of this course, the participant will be able to: • Operate the IBM 360 in a Primary Control (PCP) and Multiprogramming (MFT & MVT) environment • Operate the IBM 360 in 1401/1460 compatibility mode • Assist programmers and systems personnel in testing and debugging • Assist other operations personnel in operating the IBM 360

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participants should have completed Basic Concepts of Data Processing, D4-105, or equivalent. Operating experience on the IBM 1401, 1460 or 360 Systems is helpful but not a prerequisite.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-301 Modern Computer Scheduling Principles

2 credits

Edwin R. Evans

A series of six lectures, discussions and workshops in the principles and practices of scheduling computer work.

Description: The installation of modern computers with the capability of multiprograming, multiprocessing, teleprocessing, real time systems, etc., have brought a new complexion to problems of job, computer, and task scheduling. Using third generation computers and operating systems as a basis, this concentrated course will cover the principles of the various scheduling methods illustrated by practical examples. Various computer operating systems will be discussed. Scheduling considerations will include foreground-background programs, input-output device scheduling, interference, partitioned core, operator-system-computer communication, etc. Both open and closed shops arrangements will be covered.

Objectives: Managers, operators, and programmers who complete this course will: • Have a handle on the principles, pitfalls, and methods of scheduling computers • Know what scheduling systems are being used and planned for use, their advantages and shortcomings • Be able to schedule computer work flow in both batch and multiprograming environments

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-November 1, 1969

Winter: January 10-February 14, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Enrollment is limited to 20 participants. Knowledge and experience in computer operations and operating systems and/or management of computer operators are required. Course D3-321; D3-304; D3-746, and D3-747 will be helpful to participants in this course.

Course Fee: \$86.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-772 Introduction to Computer Time-Sharing

3 credits

To be announced

A series of ten lectures, discussions and demonstrations of computer time-sharing.

Description: The computer as public utility of data processing power has its beginning in computer time-sharing. This course describes and analyzes the various hardware-software systems available in the areas of: large scale scientific applications; large scale business type applications; small scale systems; conversational made programing; and remote job entry.

The future of time-sharing, based on the current state of the science and art will be discussed. Time-sharing, priority and class, interruptions, roll in-roll out, queing, interference, background-foreground are among the subjects covered.

Objectives: The course is designed for: • Participants to become familiar with the many aspects and considerations of computer time-sharing • Successful completion of the course should prepare the student to determine the effect of time-sharing on an organization data processing requirement, to compare and evaluate different time-sharing systems, and to select and implement time-sharing.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a familiarity with and experience in data processing. If the student has only class work to meet prerequisites, at least four ADP courses are required.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-595 COBOL Programing

3 credits

James J. Quinlan, G. Van Standifer

A series of ten lectures, workshops and computer laboratories leading to proficiency in COBOL programing.

Description: This is a practical course of Common Business Oriented Programing Language (COBOL). The concept of compilers, identification, environment, data division, procedure division, problem definition, flow charting, coding, desk checking, test data preparation, compilation, testing, debugging and documentation will be learned.

Workshop and laboratory sessions will use the IBM 360 and the operating system and COBOL compiler to solve practical, realistic programing problems. Actual experience in coding, compiling, and testing individual and group problems will be provided in the laboratory sessions.

Objectives: Upon successful completion of the course the participants will be prepared to:

- Efficiently use COBOL to solve problems of reasonable complexity, and by using the skills gained, develop proficiency in COBOL with additional practice
- Use the IBM 360 operating system efficiently with COBOL
- Know the advantages and disadvantages of COBOL and when and where this language should be used in ADP situations

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed Basic Concepts of Data Processing, D4-105, or equivalent.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-529 The Systems Approach to COBOL

3 credits

Marjorie Ann Laign

A series of ten seminars and workshops covering advanced COBOL programing and basic concepts of systems analysis and design.

Description: This course will provide a system approach to ADP problems involving COBOL programs for the IBM 360. It is designed for personnel having a knowledge of COBOL. Under the guidance of the instructor, the class will design and program a complete system. The system will require only COBOL programs to be written. Participants will be provided with instructions in the basic principles of system analysis and design in addition to advanced techniques in COBOL programing.

Objectives: Upon successful completion of the course, the student will be able to:

- Design ADP systems using COBOL programs exclusively
- Have a better understanding of COBOL techniques and limitations

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have COBOL programing experience or have completed Course D3-595.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-589 FORTRAN IV Programing

3 credits

John V. White

A series of ten seminars and workshops covering the FORTRAN IV programing language.

Description: This course is designed to cover all aspects of the FORTRAN IV programing language. Included in the seminars will be basic components, flow of control, floating point arithmetic, constants, variables, arithmetic expressions, looping instructions, input/output instructions, format statements, and subroutines. Workshops will consist of individual and group participation on exercises and problem programs. Actual experience in compiling and testing of programs will be provided. This course is oriented towards the IBM 360 Systems, however, approximately 95 percent of the material covered is applicable to other computers.

Objectives: On completion of this course, the participant will be able to: • Write programs of reasonable complexity using the FORTRAN IV programing language • Assist other individuals in their organizations in using the FORTRAN IV language

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a minimum of two years college mathematics and/or statistics or have direct experience or anticipated assignment in a large data processing installation.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-531 The Systems Approach to FORTRAN IV

3 credits

Edward A. Robin

A series of ten seminars and workshops covering advanced FORTRAN IV programing and basic concepts of systems analysis and design.

Description: This course will provide a system approach to ADP problems involving FORTRAN IV programs for the IBM 360. It is designed for personnel having a knowledge of FORTRAN IV. Under the guidance of the instructor, the class will design and program a complete system. The system will require only FORTRAN IV programs to be written. Participants will be provided with instructions in the basic principles of system analysis and design in addition to advanced techniques in FORTRAN IV programing.

Objectives: Upon successful completion of the course, the student will be able to: • Design ADP systems using FORTRAN IV programs exclusively • Have a better understanding of FORTRAN IV techniques and limitations

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have FORTRAN IV programing experience or have completed Course D3-589.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

D3-521 Report Program Generator (RPG) IBM 360

3 credits

William J. Cassidy

A series of ten seminars and workshops covering report generator programing.

Description: Designed for personnel with limited data processing background to write RPG programs for the IBM 360.

This course is especially profitable for students who wish to become fully independent programmers in the shortest possible time.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Objectives: Upon successful completion of the course, the student will be able to: • Write any relatively complex program that is RPG oriented • Become a fully independent programmer • Become a valuable asset to any IBM 360 installation • Code the control cards necessary for the operating system

Schedule: Classes meet Saturday mornings 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Nominations accepted after due date if class space is available.

Nominations due:

September 10, 1969

Qualifications: Participation is limited to 20 students. Participants should have had Basic Concepts of Data Processing, D4-105, or equivalent work experience.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-523 Assembler Language Coding (ALC) IBM 360

3 credits

John J. Connolly

A series of ten lectures and workshops, on the practical use of IBM 360 Assembly Language.

Description: This course will give the student knowledge of the complete assembly language coding instruction set, and the set's use and application to typical data processing problems, both administrative and scientific. General input/output techniques will be discussed and one data set organization input/output method will be used to complete full programing capability. Problem definition, flow charting, coding, testing, and debugging are included.

Workshop sessions with a practical class problem being defined, flow-charted, and coded in assembly language will be brought to fruition by assembling and testing the student's programs on the computer.

Objectives: Successful completion of this course will enable the participant to: • Efficiently use ALC to solve the normal complexity programing problems required in ADP installations • Successfully use the facilities of the IBM 360 operating system to assemble, test, and execute ALC programs • Develop all basic knowledge and skills which the participant needs to become an accomplished ALC programmer with additional work situation practice

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations accepted after due date if class space is available.

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Qualifications: Participation is limited to 20 students. Data Processing System/360 or equivalent experience programing stored program computers in assembler language is a prerequisite of enrollment.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

D3-522 Programing Language/One PL/1, IBM 360

3 credits

David V. Kerr

A series of ten lectures combined with computer workshops leading to proficiency in the PL/1 programing language.

Description: This course is a practical user-oriented approach to PL/1. The language is defined and explained in detail. Subjects covered include: Program definition, assignment statements, control statements, list and data directed input/output, groups and arrays, structures, edit direct input/output, stream input/output, report writing, built in functions, asynchronous processing, and compile time facilities.

Workshop will consist of defining and solving realistic programing problems. Actual experience in coding, compiling, and testing individual group problems, using the IBM 360 compiler and computer, will be provided.

Objectives: Upon successful completion of this course the participant should be able to: • Use PL/1 to solve data processing problems of reasonable complexity and with additional practice will be completely proficient in PL/1 • Operate with adequate proficiency the System/360 and to use this system in conjunction with PL/1 • Know the advantages and disadvantages of the language and be able to advise and make decisions concerning the use of PL/1 in ADP work situations • Assist others in the use and application of PL/1

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed Data Processing IBM 360, D3-578. COBOL, FORTRAN or ALC coding are recommended or equivalent experience in data processing on large scale computer.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-759 ADP Systems Analysis and Design

3 credits

Willis J. Martin

A series of ten seminars on systems analysis and design.

Description: This course is designed to cover the basic principles and problems in systems analysis and design and to acquaint the student with the systems approach to ADP. Examples of various systems will be presented.

Objectives: On completion of this course, the participant will be able to accomplish the following: • Participate in a feasibility study • Participate in a systems analysis • Participate in a systems design • Prepare documentation for systems work

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have at least six months of programming experience.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D3-719 ADP Systems Design Workshop

3 credits

Edward A. Robin

A series of ten seminars and workshops covering Advanced Systems Analysis and Design.

Description: This course is designed for those who have mastered the fundamental principles of Systems Analysis and Design. Included in the material to be covered at the seminars are: Planning the system, Organizing the systems survey (forming the team, establishing the goals, etc.), Giving cost estimates for systems, Establishing standards for Systems Analysis (procedures, documentation, forms design, etc.), Monitoring the project, Implementing the project, The follow-through of systems implementation, Human factors in data processing, and the relationship of Systems Analysis and Top Management.

Objectives: On completion of this course, the participant will be able to: • Plan an ADP system • Give cost estimates on ADP systems • Monitor the progress of the ADP systems team • Implement the ADP system • Establish the functional standards in Systems Analysis • Better communicate with top management and user organizations on ADP systems

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969
Winter: January 10-March 21, 1970
Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969
December 15, 1969
March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants must have a background in Systems Analysis or have completed Course D3-759, or the equivalent.

Course Fee: \$115.00, payable in advance. Fee includes textbooks and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-601 Decision Tables: Techniques and Applications

No credit

James J. Fraher

A two-day seminar designed to provide systems analysts and programmers with an understanding of the basic concepts and applications of decision tables.

Description: Decision tables are auxiliary time saving aids for the ADP systems analyst and programmer to develop and express complex decision logic in defining data processing problems.

Course consists of lectures and classroom exercises in the application of decision tables to representative ADP systems analysis and documentation problems.

Objectives: On completion of this course, the participant will: • Understand the basic concepts of decision tables • Be able to apply this technique to system analysis, logic presentation, and documentation • Know the software which is available to support decision tables

Schedule: Classes meet Monday and Tuesday, 8:30 to 4:30 p.m.

Classes will be held:

December 15, 16, 1969

March 2, 3, 1970

Nominations due:

December 1, 1969

February 15, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 participants at GS 11 (or equivalent) level and above.

Course Fee: \$90.00, includes textbooks and class material.

D3-597 Computer Programing for Automated Composition

Kenneth Close, Ronald G. Bergsmith, Don J. Reed, Elmo J. Wood

A series of ten seminars and workshops covering photocomposition and the automation of publications.

Description: This course is designed for all persons involved or getting involved in photocomposition and other means of automating publications. Included in the material to be presented at the seminars are: An orientation to data processing, Fundamentals of computer programing, Fundamentals of systems analysis, Project documentation, History and development of automatic typographic-quality typesetting techniques, Fundamentals of photocomposition, The Government Printing Office's (GPO) Linotron photocomposition operation, Future prospects for automated typography.

Objectives: On completion of this course, a successful participant will: • Know what data processing is about and how it is applied to automated typography • Know, understand and apply methods and performance standards to photocomposition systems • Assist in the development of a system for photocomposition • Know the GPO requirements and use of their photocomposition system • Evaluate their own publications to determine the possible use of automated means for publication.

Schedule: First eight classes meet Tuesday and Thursday evenings from 5:30 to 7:30 and 9:30 p.m. Last two classes meet Saturdays from 9:00 a.m. to 5:00 p.m.

Courses will be held:

Fall: September 29-November 8, 1969

Winter: January 12-February 28, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should be persons in the printing business who want to know how the computer is applied to automated typography, technicians who are required to write programs or develop systems for photocomposition, and users who need to evaluate what publications they originate which may be a subject for automated typography.

Course Fee: \$150.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-603 Source Data Automation

2 credits

To be announced

A series of six seminars and workshops covering Source Data Automation.

Description: This course is designed to survey all aspects of Source Data Automation. Included in the seminars will be systems design for effective utilization, program design for realistic data quality control, operator training, post installation review and evaluation, and equipment selection. The course emphasis will be placed on capturing source data with a minimum of disturbance to an otherwise optimum data processing system.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Objectives: On completion of this course the participant will be able to: • Recognize potential application of source document automation • Participate in the design of an effective SDA system • Outline the programmed edit check procedures required for data acquired through SDA • Establish proper training procedures for operators of the SDA hardware

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Winter: January 10-February 14, 1970

Spring: April 11-May 16, 1970

Nominations due:

December 15, 1969

April 1, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have formal education or practical experience in the field of ADP. An understanding of basic ADP systems and programing concepts is assumed.

Course Fee: \$86.00, payable in advance. Fee includes text books and class material.

D3-637 Scientific Data Acquisition

2 credits

John Joseph Cox

A series of six lectures, discussions and on-site investigations covering the principles, equipment, and techniques of scientific instrumentation, and data capturing display and retention.

Description: This course is designed to present the student with the practical definition and application of scientific data acquisition principles, methods, techniques, and equipment. Sensors, type of measurement, data reduction, digitization, display, computational reduction of raw data and methods of output from the scientific instrumentation for immediate or delay computer analysis will be covered. Classroom instruction will be supplemented with actual demonstration.

Objectives: To familiarize those involved with scientific investigation with the state of the art in electronic instrumentation and to provide them with the basics of scientific data acquisition in a practical light.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Course will be held:

Winter: January 10-February 14, 1970

Nominations due:

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants must be actively involved or have interest in scientific research.

Course Fee: \$86.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-635 Information Storage, Retrieval, and Dissemination

3 credits

Raymond J. Long

A series of ten lectures on the concepts of information storage, retrieval, and dissemination using ADP.

Description: This course is designed to cover the concepts of storing information for subsequent retrieval and dissemination. Documentation, abstracting, indexing, coding, storage, retrieval, vocabulary control, and dissemination methods are presented.

Objectives: On completion of this course, the participant will be able to: • Conduct analyses and design of information storage and retrieval systems • Set up procedures for or supervise an indexing operation • Assist subject-matter specialists in setting up authority lists • Set up procedures for information dissemination

Schedule: Classes meet Saturday mornings 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed at least one year of ADP analysis experience.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-606 Teleprocessing and Data Communication Systems

3 credits

Richard A. Prescott

A series of ten lectures, demonstrations, systems analyses, and discussion concerning principles, applications, and the "state of the art" of teleprocessing and data communication.

Description: As the technology of computers grows in speed and capacity and the scope of data processing increases to include nation-wide and world-wide sources of information and information needs from centralized files and a centralized processor, instantaneous long distance communication equipment and methods are demanded. This course will explore the current state of the art of high speed data communication equipment and methods, teleprocessing, real time, and batch processing. Wire, radio, teletype, data net, Telpack, communication equipment and systems will be covered as well as central processor and peripheral systems and programing methods and requirements. Cost factors, response time, and the advantages and disadvantages of various equipment and methods will be analyzed. Visits to operating installations will be made to observe current solutions to practical problems in teleprocessing and data communication.

Objectives: Participants in this course will: • Know the principles, considerations, pitfalls, costs, and methods involved in teleprocessing and data communication • Obtain knowledge in depth of actual working installations • Have broad practical principles with which to plan, install, and evaluate teleprocessing and data communication systems

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have completed Basic Concepts of Data Processing, D4-105, and at least one advanced data processing course or equivalent, plus vital interest in teleprocessing and data communication.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-638 Workshop in Teleprocessing

3 credits

Richard A. Prescott

A series of ten workshops in Teleprocessing and Data Communications.

Description: The participants in this workshop will, with the guidance, counseling and stimulation of the instructor, conduct the analysis, design, and evaluation of one or several teleprocessing or data communication systems. The class will participate in selection and definition of the projects. By the end of the workshop each participant will have defined, designed, and documented a teleprocessing or data communication system. The subject matter will, as far as practical, be those for which the participants have particular need and/or interest.

Objectives: On completion of this workshop the participants will: • Have a better understanding of the practical problems involved in teleprocessing and data communication systems • Have acquired some solutions to their own problems • Be able to assist others in designing and implementing teleprocessing and communication systems

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. A background on the principles of telecommunications is required. The participants should have completed course D3-606, Teleprocessing and Data Communication Systems, or the equivalent.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-512 ADP Documentation and Writing

2 credits

John William Jones

A series of six seminars and workshops covering documentation and writing for ADP installations.

Description: This course is designed to cover all aspects of documentation and writing for ADP installations. Included in the course will be operations documentation, programing documentation, systems documentation, administration documentation, and report writing for non-ADP readers. The students will prepare, under the guidance of the instructor, a model procedures manual for documentation.

Objectives: On completion of this course, the participant will be able to: • Write documentation standards and procedures for his own organization • Assist others in preparing documentation • Create better reports and presentations on ADP subjects, especially when they are to be presented to non-ADP personnel

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-November 1, 1969

Winter: January 10-February 14, 1970

Spring: April 11-May 16, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should be senior programmers, programmer supervisors or have permission of instructor.

Course Fee: \$86.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-044 Certificate in Data Processing Review

No credit

To be announced

A series of ten lectures and discussions covering the full gamut of aspects and elements of data processing.

Description: A general tying together and an overall review of data processing, including: Electronic computer concepts and equipment, Unit Record concepts and equipment, Data systems concepts and equipment, Application in the fields of accounting, mathematics, statistics and related sciences, Management of data processing organizations.

Objectives: This course is designed to: • Provide updating and refamiliarization to those who have not been directly involved in data processing for some time • Tie together and add perspective to students completing a number of courses in ADP • Prepare data processors for the DPMA Certificate in Data Processing

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Course will be held:

Winter: January 10-March 21, 1970

Nominations due:

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have considerable course work and/or experience in data processing and a self-felt need for this course.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

ADP Career Counseling

A service designed to assist the individual in determining his aptitude in the field of data processing.

Description: The counseling consists of two sessions:

1. Individual takes a practical ADP aptitude test and completes a specially developed questionnaire to list his training and experience and to indicate his response to inquiries that may be helpful to the counselor in advising him in regard to a career in ADP.

2. Individual has an interview with an experienced and competent counselor in the data processing field to evaluate results of ADP test, as well as the education, experience, training, and special interests of the individual. Results are confidential and are revealed only to the individual.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Sessions are by appointment only, either at 8:00 a.m. weekdays or Saturday mornings. Appointments are arranged to meet the mutual convenience of the individual and the counselor.

Fee: \$20.00, payable in advance. Registration forms may be obtained from the Special Programs Department, Graduate School, U.S.D.A., National Press Building, Room 277, Washington, D.C. 20004.

D3-732 Computer Solution of Statistical Analysis Problems

3 credits

Benjamin T. McDaniel, Robert H. Miller

A series of fourteen seminars and workshops covering statistical methods and the application of computers to their use.

Description: The course briefly reviews the principals on which statistical techniques are based. Topics to be emphasized will be the analysis of variance, correlation, multiple regression, and curve fitting. Computer solutions with widely available generalized analysis programs will be emphasized in the discussion of each statistical technique. Case studies and actual computer solutions will be used with each of the analysis procedures studied.

Objectives: On completion of this course, the participant will be able to: • Solve data analysis problems using the more basic statistical techniques • Utilize certain widely available computer programs to carry out these statistical analyses

Schedule: Classes meet Saturday mornings from 9:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27, 1969-January 17, 1970

Spring: February 14-May 23, 1970

Nominations due:

September 10, 1969

February 1, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a minimum of one course in college algebra, one course in basic statistics, and some concept of the use of electronic computers, or the equivalent work experience.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

D3-604 ADP Auditor Applications

3 credits

To be announced

A series of ten lectures and workshops designed to give the auditor an insight into the characteristics and methods peculiar to ADP systems and operations.

Description: This course is intended for the auditor, accountant, or data processor who has the demand for auditing or controlling ADP systems and/or installations. The lectures and workshops include practical study of the computers' impact on accounting methods, automated controls, audit trails, sampling techniques, system security, installation standards, planning and executing an audit of a typical system, audit reporting, and role of auditing in ADP management.

Objectives: Successful participants in this course will be able to: • Knowledgeably plan and complete an audit of an ADP system • Install a complete system of automated controls in an ADP system • Evaluate and improve audit procedures of an ADP system • Better participate in the management of systems involving automatic data processing operations and methods

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Course will be held:

Winter: January 10-March 21, 1970

Nominations due:

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have audit training or experience and currently have or anticipate having auditor responsibility in operations involving data processing.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-605 ADP Budget and Finance Applications

3 credits

John L. Ferber

A series of ten seminars and lectures designed to give personnel in budget and finance operations an insight into the characteristics and methods peculiar to ADP operations.

Description: This course is designed for budget and finance personnel who have limited knowledge of data processing and have need for an understanding of ADP methods and techniques as they apply to budget and finance applications.

The seminars and lectures will include a practical study of the computer impact on budget and finance operations, the planning and systeming necessary prior to the automation of budget and finance operations, and the advantages to be gained as well as the pitfalls to avoid.

Objectives: On completion of this course, participants will: • Have a basic understanding of data processing • Have a concept as to how computers handle budget and finance applications • Understand the problems involved in computerized budget and finance operations • Know the pitfalls to avoid in planning or generating computerized budget and finance applications • Be qualified to discuss and effectively work with analysts/programers on budget and finance applications

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have training in budget and finance operations or experience, and currently have or anticipate having responsibility in budget and finance operations involving data processing.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D3-724 ADP Transportation Applications

No credit

Jules B. DuPeza, Robert E. Jones, Ralph W. Zimmer

A three-day seminar and workshop on computer applications of land, sea and air transportation problems.

Description: This course is designed to explore the area of systems design in the transportation field. Subject matter in the field of transportation and computer capability are available. Bridging the gap between the two is an area that remains to be explored. Examples of classic problems confronting the transportation field are examined in detail to give the student insight into the ramifications of the problem and an opportunity to develop a system solution. The currently accepted solution which is used in the field is presented to illustrate the ingenious techniques developed by leaders in transportation system design work.

In some cases several solutions are examined and evaluated to illustrate that there is more than one possible solution and that quite often the differences are slight or a matter of preference.

Objectives: Upon completion of this course, the participant will have more insight into the many techniques employed in the field and will be equipped to better utilize the capabilities of electronic computer equipment as a tool in solving the many problems in the field of transportation.

Schedule: Classes meet 8:30 a.m. to 4:30 p.m.

Course will be held:

Winter: January 26-28, 1970

Nominations due:

January 10, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have senior analyst and senior program training and experience or equivalent.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-743 ADP Engineering Applications

3 credits

Robert S. Smith

A series of ten lectures and workshops for engineers with no previous experience with digital computers.

Description: This course is intended to acquaint the engineer who has no previous experience with digital computers with the areas of application of a general purpose digital computer to engineering problems. Subjects covered will include a short history of computing, what a computer is and what it works with, mathematical methods, programing languages with an emphasis on FORTRAN, and discussions of specific engineering applications. There will be an opportunity to program and check out short jobs on a computer.

Objectives: This course is intended to provide the engineer with enough background knowledge to enable him to determine the feasibility of the effective and economic use of a computer for various applications and to develop procedures for best utilization of the computer.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Course will be held:

Winter: January 10-March 21, 1970

Nominations due:

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Enrollment is limited to those persons with a degree in engineering or the physical sciences, or with equivalent experience in the field. No experience with a digital computer is required.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

D3-756 ADP Medical Applications

No credit

Leroy L. Cook, Jr.

A three-day seminar and workshop covering ADP Medical Applications.

Description: This course is designed to be a survey of medical applications of ADP. Included in the seminars will be discussion of the hardware configurations available to a medical complex and record maintenance applications in both the administrative and patient history. Other discussions will be directed toward utilization of the computer as a tool for medical research and real time patient monitoring. The emphasis of the course will be placed on realization and insight into practical applications of the computer within a hospital environment.

Objectives: On completion of this course the participant will be able to: • Process a basic insight into ADP systems and programing of medical applications • Recognize potential ADP applictaion to the medical environment • Participate with the subject matter specialist in design of such a system

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Course will be held:

Winter: January 19-21, 1970

Nominations due:

January 5, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have formal education or practical experience in medical environment.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-514 ADP Library Applications

3 credits

Stephen R. Salmon

A series of ten lectures and workshops designed to give librarians and library assistants the fundamentals of data processing as applied to library operations and procedures.

Description: This course is intended for both professional and non-professional personnel working in libraries or interested in the impact of automation on library work.

The lectures and workshops will include an introduction to the principles and terminology of automatic data processing; system analysis and system design principles; use of the tools and techniques of systems analysis and design, including flowcharting; study of punched card and punched tape machines used in library applications; an introduction to computers, computer systems, and computer programing, particularly as used in library applications; study of automated systems in acquisitions work, in cataloging, in serials control, and in circulation; an introduction to the principles and general types of information retrieval; a study of various automatic indexing and abstracting techniques, including KWIC and SDI; and a brief consideration of the administrative implications of library automation.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Objectives: On completion of the course, participant will: • Have a basic understanding of data processing and computers • Understand the ways in which data processing and computer techniques are now being used in library work • Be able to do elementary analysis of library operations and their potential for automation • Be able to work with analysts, programmers and other experts in designing automated library systems

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have formal training and/or experience in library work and an interest in ADP applications to library procedures. No prior training or experience in data processing is required.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D3-768 ADP Applications for Bankers

No credit

To be announced

A three-day seminar and workshop covering data processing for bankers.

Description: This course is especially designed for those persons in the Banking profession who want to understand and keep abreast of the use and development of Automatic Data Processing as a tool in the field of banking. Included in the material to be presented at the seminars are: An introduction to ADP machine methods; Savings Accounting, Loan Payments, Interest Dividend Reporting, Brokerage Accounting, Billing and Collecting Services, Real Estate Loans Accounting, Reconciliation Services, and Credit Card accounting. Among the automated systems to be discussed in detail will be the MICR-encoded (Magnetic Ink Character Reader) and OSCAR (Overnight Statewide Customer Accounting Reporting).

Objectives: On completion of this course, the participant will be able to: • Understand the uses and purposes of ADP equipment • Know what is being done in the banking profession with this tool • Understand the workings of some of the operating ADP systems used in the banking profession • Understand some of the problem areas and be able to cope with them when encountered in their own operation • Evaluate his own operation in terms of the uses that ADP equipment may be applied • Be able to communicate with the ADP technicians

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Course will be held:

Winter: February 25-27, 1970

Nominations due:

February 10, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants must be in the banking profession. Prior knowledge of data processing not required.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-763 ADP Applications for Attorneys

No credit

To be announced

A three-day seminar and workshop covering data processing for attorneys.

Description: This course is especially designed for attorneys who want to understand and keep abreast of the use and development of Automatic Data Processing as a tool within their profession. Included in the material to be presented at the seminars are: An introduction to ADP machine methods; Uses and contracting for computers; ADP uses in the Legal Practice, particularly in legal research, estate planning, legal record keeping, law office management, dockets and court congestion. Working legal systems will be discussed including the Internal Revenue System, the legal retrieval system used by the G-W Graduate School of Public Law, the lawsearch service offered by a private firm, the automation of the health statutes by the University of Pittsburgh, and the work being done by the ABA and the Special Committee on Electronic Data Retrieval.

Objectives: On completion of this course, the participant will be able to: • Understand the uses and purposes of ADP equipment • Know what is being done in the law profession with this tool • Understand the workings of some of the operating ADP systems used in the legal practice • Evaluate his own operation in terms of the uses that ADP equipment may be applied • Be able to communicate with the ADP technicians

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Course will be held:

Winter: February 25-27, 1970

Nominations due:

February 10, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants must be lawyers. Prior knowledge of data processing not required.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

D3-767 ADP for Personnel Administration

No credit

James J. Fraher

A three-day seminar covering data processing for personnel applications.

Description: This course is specially designed for those persons engaged in the Personnel field who want to understand and keep abreast of the use and development of Automatic Data Processing as a tool used in Personnel Administration. Included in the material to be presented at the seminars are: An introduction to ADP machine methods; Personnel Accounting; Personnel Record Maintenance; Personnel Skills Inventory; and the problems and effectiveness of Source Data Automation (SDA) for personnel systems. Among the automated systems to be discussed in detail will be the CSC Executive Inventory, NASA's Personnel Management Information System (PMIS), and the Department of Commerce's SPARTAN system. This will be supplemented by several automated Personnel Systems now being implemented in private industry.

Objectives: On completion of this course, the participant will be able to: • Understand the uses and purposes of ADP equipment • Know what is being done in the Personnel field with this tool • Understand the workings of some of the operating ADP systems used in Personnel Administration • Understand some of the problem areas and be able to cope with them when encountered in their own operation • Evaluate his own operation in terms of the uses to which ADP technology may be applied • Be able to communicate with the ADP technicians

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Courses will be held:

Winter: January 5-7, 1970

Spring: April 29-May 1, 1970

Nominations due:

December 15, 1969

March 15, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants must either be in the Personnel field or be ADP technicians who are now, or shortly will be, involved in the automation of Personnel Systems.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D3-718 ADP for Executives

No credit

Kenneth G. Close, J. Frank Kendrick, Raymond J. Long

A three-day seminar designed to provide executives with an indoctrination in the basic principles of ADP and an overview of the executive's involvement with it.

Description: Executives are provided with the basic concepts of ADP along with the new concepts in management created by it.

Objectives: On completion of this course, the participant will be able to: • Understand the basic concepts of ADP • Understand how ADP systems function • Understand the managerial considerations involved in planning, setting up, and operating ADP systems • Become familiar with representative equipment, its application and potential

Schedule: Classes meet Mondays through Wednesdays 8:30 a.m. to 4:30 p.m.

Courses will be held:

Fall: October 27-29, 1969

Winter: January 26-28, 1970

Spring: April 27-29, 1970

Nominations due:

October 10, 1969

January 10, 1970

April 10, 1970

Qualifications: Participation is limited to 25 executives at the GS-13 (or equivalent) level and above.

Course Fee: \$150.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D6-5 Critical Issues and Decisions for Government Executives

(See p. 2)

D6-5(B) Critical Issues and Decisions at Belmont

(See p. 2)

D6-41 The Future

(See p. 3)

D3-533 Introduction to Operations Research

3 credits

Elias A. Parent, Jr., Thomas J. O'Connor

A series of ten lecture/seminars designed to introduce the student to the nature of Operations Research.

Description: This course will cover the genesis and subsequent development of Operations Research emphasizing its characterizing methodology, and the mathematical models. These topics will be discussed in broad terms whereas the more specific tools of Operations Research, such as Probability Theory and Statistics, will be treated in more detail. Linear programming and methods used in the preparation and analysis of data and experimental results will also be discussed. Demonstration of the applicability and versatility of Operations Research will take the form of a review and discussion of case histories taken from industry, civil government, and military research.

Objectives: The objectives of this course are to: • Trace the development of Operations Research and explain its basic methodology—the mathematical model • Develop some of the tools of Operations Research so that the student will understand some of the capabilities and limitations of the methodology • Expose the student to some of the administrative aspects of carrying out Operations Research in his own organization

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have a minimum of two years college mathematics and/or statistics.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

D3-754 ADP Project Management

3 credits

Raymond J. Long

A series of ten seminars and workshops covering ADP project management.

Description: This course is designed for those who are preparing to be and those who are project managers in ADP, from either the user organization or the ADP technical areas. Included in the material to be presented at the seminars is: Initiating, planning, organizing, costing, developing, monitoring, controlling, administering, completing and evaluating the project. Particular emphasis will be placed upon Methods and Performance Standards, Cost Estimates and Analysis, Program Evaluation and Reporting Techniques (PERT), human factors in project management; How to document the project.

Objectives: On completion of this course, a successful participant will be able to manage an ADP project in the following areas: • Organize a project team • Effectively communicate with personnel involved in the project • Apply methods and performance standards • Give cost estimates for a project • Develop PERT charts covering cost, time and critical path • Document the project • Implement the project • Evaluate the project.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should be project managers or those who anticipate being project managers from either ADP or user organizations.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-747 ADP Installation Management

3 credits

Raymond J. Long

A series of ten seminars and workshops covering data processing management.

Description: This course is designed both for those who actually manage automatic data processing installations and for those managers who are subject matter oriented and are users of ADP services. Included in the material to be presented at the seminars are: ADP equipment acquisition; ADP cost analysis; the preparation of action plans for ADP applications; personnel recruiting, staffing, training and retraining; human behavior in ADP; establishing standards for ADP; establishing ADP controls and measurements; management information systems; government regulations and agency policies affecting ADP; and ADP contract administration. Case studies and problems will be discussed and analyzed.

Objectives: On completion of this course, the participant will be able to: • Recognize ADP management problems and be able to pursue appropriate courses of action in their solution • Evaluate ADP applications to determine priorities, cost analysis, and time schedules • Know the ADP personnel problems and possible solutions • Recognize the human element in ADP • Establish standard and controls in ADP to insure the most efficient use and benefits are derived from the system • Establish a management information system

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should be supervisory personnel who either manage ADP facilities or are subject matter supervisors who use, or anticipate use of, ADP services.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D3-744 Data Processing Equipment Evaluation and Selection

No credit

Edwin R. Evans

A three-day seminar designed for Executives and Managers who need to know how to evaluate and select computers and other data processing equipment.

Description: This course is designed to cover the many aspects of automatic data processing equipment selection. Subject matter to be included in the conferences will be the feasibility study, the applications study, equipment specifications, the evaluation of proposals, site preparation and installation, parallel operations, conversion, government regulations and agency policies. Although the course will be geared to computer equipment acquisition, peripheral and supporting equipment will also be covered. Case studies and problems will be discussed and analyzed.

Objectives: On completion of this course, the participant will be able to: • Know how to conduct and evaluate both ADP feasibility and ADP application studies • Prepare equipment specifications to solicit proposals and to be able to evaluate the proposals submitted by manufacturers • Design the lay-out of equipment for installation • Plan and phase-in operations on the equipment to gain maximum machine utilization • Recognize government regulations, including the Brooks Bill, and policies affecting ADP equipment acquisition and know what they mean

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Courses will be held:

Fall: October 22-24, 1969

Winter: February 2-4, 1970

Nominations due:

October 10, 1969

January 20, 1970

Nominations accepted after due date if class space is available.

A special course on this subject tailored to organization's individual needs can be arranged on a contract basis.

Qualifications: Participation is limited to 20 students. Participants should be supervisory personnel who are, or expect to be, involved in ADP equipment acquisition.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-594 Federal Contract Management for ADP

No credit

Darrel F. Peters

A three-day seminar and workshop covering the contracting in the Federal Government for ADP Software Products.

Description: The course is designed to bring together persons with contracting experience or responsibilities for the purpose of receiving and exchanging information pertinent to the successful contracting and awarding of automatic data processing work in the Federal Government. The course will be directed to ADP Systems Analysis, Programing, Documentation and ADP Operations—other than the computer itself, the site and utilities or computer maintenance.

ADP contracting skills will be developed and improved through lecture, group and panel discussions; classroom case studies; Requests for Proposal structuring, techniques of evaluation and selections, negotiating and make-up of the contractual documents.

Objectives: Upon completion of this course, the participant will be able to contract for ADP Services related to the following: • ADP Feasibility Studies • System Analysis • System Design • Operational Analysis • Programing (Scientific and Business) • Program Conversion Techniques • ADP Operational Services • EAM Services

Schedule: Classes meet from 8:30 a.m. to 4:30 p.m.

Courses will be held:

Fall: October 8-10, 1969

Winter: February 2-4, 1970

Nominations due:

September 20, 1969

January 20, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 25 students, usually GS-11 and above who have had no prior or limited contracting experience in ADP. Nominees should be well versed in the general overall Federal Contracting methods, laws, and regulations, and have a genuine motivation to work in this field.

Course Fee: \$90.00, payable in advance. Fee includes text books and class material.

D3-532 Linear Programing

3 credits

Roger Glenn Schroeder

A series of ten lecture/seminars designed to introduce the student to the nature of Linear Programing.

Description: This course will emphasize the simple theory and applications of Linear Programing. The theory enables the student to grasp the basic concepts while the applications broaden and exemplify these concepts. Topics included are: Linear Program Formulations, Graphical Solution Techniques, the Simplex Method, Duality, and the Transportation Problem. To provide for a basic understanding, case studies and the various methods for solving linear programs will be emphasized.

Objectives: The objectives of this course are: • To teach the fundamental techniques and methods for solving linear programs • To provide the student with numerous actual examples and cases • To show the student how to define and solve his own linear programing problems

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Qualifications: Participation is limited to 20 students. Participants should have a minimum of two years of college mathematics and/or statistics.

Course Fee: \$138.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

D3-584 Developing ADP Specialists

No credit

Kenneth G. Close

A series of six lectures, discussion experiments and workshops in developing ADP specialists.

Description: Data processing supervisors and managers are faced with the continuing and growing problem of shortages of programmers, systems analysts, operators, clerks and above all, good supervisors at all levels. The existing schools and training programs must be supplemented by ADP managers in their own organizations. This course is designed to assist managers, supervisors, and potential supervisors in the training and development of ADP specialists in the faces of these problems of shortages, turnover and dynamic growth. The problems, available solutions, and methods of development for operators, programmers, systems analysts, clerks, and supervisors will be covered.

Objectives: On successful completion of this course, the participants will be able to: • Select and direct the training and development of ADP specialists at all levels • Plan for the short term and long range growth of their data processing organization • Plan their own personal development as ADP specialists and managers

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-November 1, 1969

Spring: April 11-May 16, 1970

Nominations due:

September 10, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 25 ADP supervisors or potential supervisory at grade GS-12 or higher. A limited number of GS-11 supervisors who have supervisory experience will be admitted on recommendation of their managers.

Course Fee: \$86.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made using the nomination form format given on the inside back cover page of this bulletin.

D6-100 (S&E) Management Program for Executives in Scientific and Engineering Organizations

(See p. 6)

D3-722 Human Factors in Data Processing

3 credits

Norman Griffith Zinger

A series of ten workshops, seminars, and lectures covering the various human factors affecting a data processing operation.

Description: This is a practical course dealing with human relations problems in organizations, with particular emphasis on the data processing environment. Interpersonal skills in an ADP operation will be explored and discussed. A framework for understanding and handling interpersonal problems in such areas as training, motivation, leadership, and morale will be offered.

Objectives: On completion of this course, participants will: • Understand the basic principles of human behavior as they relate to creativity, job commitment, and production • Be acquainted with a practical approach to personnel problems • Understand the factors that influence morale in an ADP operation

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-November 1, 1969

Winter: January 10-March 21, 1970

Nominations due:

September 10, 1969

December 15, 1969

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should have the responsibility for the work of subordinates i.e., Director, Deputy Director, Branch Chief, Section Head, Project Leader, or equivalent responsibilities.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made using the nomination form format given on the inside back cover page of this bulletin.

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

DP3-4 Basic Statistics

(See p. 47)

D3-013 Statistical Methods for Executives

3 credits

William R. Pabst

A five-day seminar designed as a review of the application of statistical techniques in the various phases of government activity.

Description: The seminar provides a review of distributions, including the application of the normal, binomial, Poisson, and other distributions, the use of control charts and sampling plans for control of operations, tests of significance, including the t and chi square tests and the calculation of confidence limits, some uses of correlation, design of experiments and a modest touch of the analysis of variance. Emphasis will be on the use and application of these techniques to study the quality, reliability, and effectiveness of administrative actions. Some sessions will be held on location in the important governmental statistical departments.

Objectives: On completion of this course, the participant will be able to: • Understand the development, need, and growth of statistical theory and methods in government • Explain the ways in which modern statistical theories and practices can be used in dynamic management • Communicate with specialists in the field and understand and interpret their reports.

Schedule: Classes will meet Monday through Friday from 9 a.m. through 12:30 p.m. and from 1:30 to 5 p.m. Late afternoon and early evening discussion sessions may also be scheduled.

Seminars will be held:

Winter: March 2-6, 1970

Spring: May 11-15, 1970

Nominations due:

February 15, 1970

April 30, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 executives at GS-13 (or equivalent) level and above.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made using the nomination form format given on the inside back cover page of this bulletin.

D6-16 Executive Effectiveness

(See p. 4)

D6-17 Advanced Management Seminar

(See p. 4)

D3-714 Introduction to Planning, Programing, Budgeting (PPB)

3 credits

Robert A. Garlock

A series of ten seminars and workshops covering the problems, challenges and concepts of PPB.

Description: Most civilian agencies have implemented some form of Planning-Programing-Budgeting system to assist decision-makers in allocating resources. This survey course, designed for the operators and program managers who have to use PPB to justify resource requirements, covers the purpose, need and objectives of PPB; the concepts; how it operates to assist in allocating limited resources; the weaknesses of PPB; a comparison of PPB with other methods and techniques; why it is being adopted; how an agency goes about implementing PPB; what can be expected from PPB; the use of ADP in PPB; and the experience of some agencies with PPB.

Objectives: On completion of this course, the participant will be able to: • Understand the concepts and practices of PPB • Know how to implement PPB at the operating levels • Know how to use PPB doctrines to allocate limited resources for optimum utilization • Recognize certain pitfalls of PPB and avoid them

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students. Participants should be management personnel who are involved, directly or indirectly, with the employment of PPB for resource justification.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

D3-761 PPB Cost Benefit Studies and Cost Effectiveness Analyses

3 credits

Robert A. Garlock

A series of ten workshops discussing theories and presenting techniques and applications for cost benefit studies as applied for program analysis and comparisons.

Description: This course is designed for PPB, budget, management, systems, or program analysts who are required to price out and compare the relative costs of programs in order to provide the decision-makers a monetary yardstick for exercising intuition and judgment in the allocation of resources. Specific problems and exercises will be presented for classroom analysis requiring participants to apply cost benefit techniques and methodology. Specific instructions will be provided to participants on analytical techniques employed to conduct cost effectiveness studies. This course concentrates attention on the analytical aspects of PPB including the discounting of money, the use of models, the introduction of simple economic principles for program evaluation and data presentation for statistical analysis including the use of ADP presentations.

Objectives: On completion of this course, the participant will be able to: • Understand the concept of cost benefit studies • Know the simple economic principles applied in cost effectiveness analysis • Know how to organize and complete a cost benefit/cost effectiveness study • Know how to present statistical and analytical data to highlight resource requirements

Schedule: Classes meet Saturday mornings from 8:00 a.m. to 12:00 noon.

Courses will be held:

Fall: September 27-December 6, 1969

Winter: January 10-March 21, 1970

Spring: April 11-June 20, 1970

Nominations due:

September 10, 1969

December 15, 1969

March 23, 1970

Nominations accepted after due date if class space is available.

Qualifications: Participation is limited to 20 students who should be involved directly or indirectly with the analytical aspects of PPBS. Completion of Planning, Programing, Budgeting (PPB), D3-714 is desirable but not required.

Course Fee: \$115.00, payable in advance. Fee includes text books and class material.

Nominations for the above courses may be made using the nomination form format given on the inside back cover page of this bulletin.

D6-80 Science Information and Communications

(See p. 45)

D6-21 Technical Information Systems for Management

(See p. 45)

For further information call Dr. J. Frank Kendrick, Code 111 (388) 7630 or 7820.

Curriculum in Professional, Scientific and Technical Development

D6-24 Management Seminar for Government Economists

(See p. 11)

D6-92 Management Seminar for Attorneys

(See p. 11)

D3-763 ADP Applications for Attorneys

(See p. 35)

D7-800 Research Methods in the Social Sciences

Dr. Harry C. Trelogan

A seminar on the development, purpose, and methods of science. The evolution and progress of research developments are traced from philosophical foundations to evaluate trends and impacts in our modern society. Comparisons with natural sciences and relationships between disciplines will be discussed to show how logic, mathematics, and research methods drawn from different sources bear on research techniques employed in social sciences.

Select guest lecturers present various topics each week followed by questions, comments, and discussions.

To equip an oncoming group of research leaders with broader perspectives by: • Giving them the benefit of observations based upon experience of an earlier generation of successful research leaders • Stressing the fundamental motivations and objectives that have yielded scientific progress • Showing the interplay of knowledge and methods acquired through different scientific disciplines • Tracing the influence of distinctive philosophic roots that have shaped science in Western culture • Appraising the significance of recent breakthroughs in scientific methods

Schedule: Classes will meet from 1:00-3:00 p.m. each Wednesday for 14 weeks. October 8, 1969-January 21, 1970. Nominations will be due on September 29, 1969.

Course Fee: \$170.00. Fee includes tuition and class materials.

D8-423 Power Systems Engineering

6 credits

John H. Rixse, Jr.

This course serves as an introduction to engineers entering the field of power systems engineering management and operations. It will also serve to update and expand the knowledge of experienced engineers. Outstanding speakers from government, industry, and university departments appear as guest lecturers and discussion leaders.

This course will help the engineer to: • Understand his role in power supply, planning, and operation • Understand the latest advances in modern power systems • Have a better perspective concerning his particular responsibilities in relation to the over-all field of power systems

Schedule: Classes meet each Thursday, 6:00-8:30 p.m. September 4, 1969-May 7, 1970. Nominations are due on or before August 25, 1969.

Course Fee: \$260.00. Fee includes tuition and all course materials for this two semester course.

For further information call C. Paul Barlow, Code 111 (388) 6410.

D3-743 ADP Engineering Applications

(See p. 34)

D3-724 ADP Transportation Applications

(See p. 33)

D6-23 Managing Human Resources in Organizations

(See p. 12)

D3-767 ADP for Personnel Administration

(See p. 36)

D4-26 Training Systems Workshop

The systems approach to training has been used to restructure entire training functions, to develop new strategies for working with operating management, and to design unique solutions to heretofore unsolvable performance problems.

This course deals with how to: • Identify performance deficiencies • Measure performance • Analyze the system which produces the performance • Determine which elements in the system adversely affects the desired performance • Design or redesign a system which will produce and maintain the desired performance • Develop instruction as part of this system. **In short, the course is concerned with the analysis and design of systems to produce and maintain human performance.**

Schedule: Classes will meet Monday through Friday, 9:30-4:30 p.m.

Courses will be held:

September 8-12, 1969

June 1-5, 1970

Nominations due:

August 29, 1969

May 22, 1970

Course Fee: \$300.00. Fee includes tuition, pre-session work, notebook and materials, and evening banquet.

D3-768 ADP Applications for Bankers

(See p. 35)

D3-604 ADP Auditor Applications

(See p. 32)

D3-605 ADP Budget and Finance Applications

(See p. 33)

D6-10 Federal Contract Negotiations

Tony Baldauf, Sam Gunther

The character of Federal contracting has increased in complexity, volume, and stature. Accordingly, there has been an increasing need for training in this field, especially among civilian contracting officers. This program is intended to give Government contracting officers, both from the field and in Washington, an opportunity to expand their knowledge and exchange ideas in the field of contract negotiation.

This course is designed to develop greater proficiency and understanding in the following areas: • Techniques and procedures in negotiation • Human factors in negotiation • Legal requirements and administrative policy in negotiation • Contract award and administration

Schedule: Classes will meet Monday through Friday, 9:00-5:00 p.m.

Courses will be held:

September 29-October 3, 1969

December 8-12, 1969

March 2-6, 1970

April 27-May 1, 1970

Nominations due:

September 15, 1969

November 21, 1969

February 16, 1970

April 13, 1970

Course Fee: \$160.00. Fee includes tuition, notebook, and all class materials.

D6-52 Contract Termination: Default and Convenience

E. K. Gubin

There is a vital need for government contracting personnel to have at their disposal the latest regulations covering the termination of contracts and services. Accordingly, this seminar will spend one full day on termination for default and one day on termination for convenience. It is designed to meet the needs of the government contracting officer, both civilian and military, to keep him abreast of the most current requirements.

Schedule: Classes will meet from 9:00-5:00 p.m.

Courses will be held:

September 18-19, 1969

November 20-21, 1969

February 17-18, 1970

May 11-12, 1970

Nominations due:

September 8, 1969

November 10, 1969

February 6, 1970

May 1, 1970

Course Fee: \$75.00. Fee includes tuition and handout materials.

For further information call C. Paul Barlow, Code 111 (388) 6410.

D6-30 Federal Contract Law: Trends and Recent Developments

Elmer Mostow

This short, intensive seminar will emphasize the key areas and typical problems encountered in Government Contract Law. The material discussed will focus on basic principles as well as on recent issues and developments in each of the areas covered. Primary attention will be on the important legal questions which most often arise in contracting situations.

Schedule: Classes will meet from 9:00-5:00 p.m.

Courses will be held:

November 3-5, 1969
February 23-25, 1970
April 27-29, 1970

Nominations due:

October 20, 1969
February 9, 1970
April 13, 1970

Course Fee: \$150.00. Fee includes tuition and all class materials.

D3-594 Federal Contract Management for ADP

(See p. 39)

D6-3 Space Management: Planning and Program Development Seminar

(See p. 13)

D4-25 Space Management: Office Layout Workshop

(See p. 54)

D3-514 ADP Library Applications

(See p. 34)

D3-637 Scientific Data Acquisition

(See p. 29)

D6-80 Science Information and Communication

John Sherrod

This is a three-day seminar for scientists and engineers to acquaint them with modern information services. Developed under a grant from the National Science Foundation, this seminar includes demonstration tours of major information activities in the Washington area.

On completion of the course, participants will:

- Understand the principles and practices of organizing and disseminating scientific and technical information
- Be aware of the expanding role of the Federal government in scientific information activities resulting from the accelerated growth of research and development
- Know how to acquire scientific and technical information through efficient use of modern information services including new Federal information programs, specialized information centers, mechanized document retrieval systems, etc.

Schedule: Classes will meet from 9:00-5:00 p.m.

Courses will be held:

December 1-3, 1969
April 13-15, 1970

Nominations due:

November 21, 1969
April 3, 1970

Course Fee: \$115.00. Fee includes tuition, class materials, and tour transportation.

D6-21 Technical Information Systems for Management

John Sherrod

The rapid growth of science and technology over the past 25 years has been accompanied by an exponential increase in the volume of information. This increase has been accompanied, in turn, by an increase in the interest in problems of effective management and use of scientific and technical information. This seminar will explore the current state of the art of information systems development and information handling technology. Various aspects of the so-called information problem will be analyzed, and examples of various systems will be presented. Future trends in information management problems of government and industry and their impact on the Federal Manager and his role and function will conclude the seminar.

For further information call C. Paul Barlow, Code 111 (388) 6410.

On completion of this seminar, participants should: • Have a better understanding of the problems involved in handling scientific and technical information • Know how to review and evaluate their own technical information programs and how to begin planning for improved systems

Schedule: Classes will meet from 9:00-5:00 p.m.

Courses will be held:

November 24-26, 1969

April 20-22, 1970

Nominations due:

November 10, 1969

April 6, 1970

Course Fee: \$115.00. Fee includes tuition and all class materials.

D3-756 ADP Medical Applications

(See p. 34)

DP3-9 Computers: A Four-Part Course in Programing

Gary Bearden

This course provides the beginner with an excellent introduction to digital computer concepts and programing techniques. The student learns to present numbers and information to a hypothetical computer, to solve and print mathematical problems and to carry this process through more advanced techniques in programing related to computer applications in government and science.

Schedule: Classes will be scheduled for Monday, Wednesday, and Friday or Tuesday and Thursday at the following times:

Section A: 9:00-10:30

Section B: 10:30-12:00

Section C: 12:30-2:00

Section D: 2:00-3:30

Section E: 3:30-5:00

Example: Mr. John Doe; Monday, Wednesday, and Friday, 10:30-12:00.

After nomination has been received, schedules will be made by the Program Coordinator and the nominee for the most suitable time. Indicate your preference of section and days, from the information above, on the nomination form.

Courses will be held:

October 6, 1969-January 9, 1970

February 2-April 24, 1970

May 4-July 24, 1970

Nominations due:

September 15, 1969

January 19, 1970

April 13, 1970

Course Fee: \$115.00. Fee includes tuition and consultation with Mr. Gary Bearden, special instructor.

DP-550 Principles of Chemistry Through Programed Learning

6 credits

Dr. Michael Pallansch

This course is designed to give the student the equivalent of a first year college chemistry course through the use of programed instruction with professional assistance. The course should appeal to physical science aides or persons interested in becoming physical science aides. It will also be useful to all adults who wish to rapidly acquire a grasp of the principles of chemistry in order to broaden their intellectual base, to better understand the work of their associates engaged in research, or to better acquire a firm foundation in the essential fundamentals of chemistry.

Programed learning is a technique which facilitates learning by emphasizing the learning process itself. The participant in this course can expect to reduce the time required to learn chemistry, upgrade his final performance, and be assured of the consistency of course quality. People who have taken this program in order to benefit their jobs have been: Biology Lab Technicians, Chemical Lab Technicians, Biology Aides, Commodity Analysts, Physical Science Technicians, Coding Clerks, Patent Classifying Aides.

The student at the completion of this course will be able to: • Apply the principles of chemistry in a working laboratory situation • Understand and appreciate efforts of those engaged in chemical research • Know and understand the principles of chemistry equivalent to a two semester college course

Schedule: Classes meet every other Thursday from 6:00-8:00 p.m. October 23, 1969-June 25, 1970. Nominations due on October 13, 1970

Course Fee: \$150.00. Fee includes tuition, nine workbooks, test booklets, and notebook.

For further information call C. Paul Barlow, Code 111 (388) 6410.

D5-23 Theory and Practice of Gas Chromatography

Dr. Irwin Hornstein

The course is designed to benefit those with a limited amount of experience in gas chromatography as well as those new to the field. Although the most recent developments will be emphasized, the course is not a research conference for experts. The material will be of interest to those working in the laboratory as well as to those interested in evaluating the technique.

Lectures will cover basic principles and practices of gas chromatography. The presentation of physical concepts rather than mathematical derivations will be emphasized. The instructors will be Dr. Irwin Hornstein and Dr. Morton Beroza; both are affiliated with USDA's Agricultural Research Service.

The student at the completion of the course should be able to: • Understand the principles that permit complex mixtures to be separated by gas chromatography • Know the limitations, advantages and modes of operation of the commonly used gas chromatography detectors • Apply the principals to actual laboratory problems

Schedule: Classes will meet from 8:00-4:30 p.m. at the Agriculture Research Center in Beltsville, Maryland. November 6-7, 1969. Nominations are due on October 20, 1969.

Course Fee: \$50.00. This fee includes workbooks and notebook materials.

D5-18 Theory and Application of Nuclear Magnetic Resonance Spectroscopy

Dr. Edwin Becker

This course will emphasize the physical concepts of NMR and not its mathematical derivations. Those with a limited amount of experience as well as those new to the field will find this course beneficial. It should assist those working in the laboratory and those interested in evaluating the technique of NMR.

Laboratory periods will permit the student to operate NMR spectrometers. Varian A-60 D, HA-100 and C-1024 instruments are available.

Schedule: Classes will meet from 8:00-4:30 p.m. at the Agriculture Research Center in Beltsville, Maryland. May 25-27, 1970. Nominations are due on May 11, 1970.

Course Fee: \$70.00. Fee includes tuition, notebook, and handout materials.

DP3-4 Basic Statistics

William Kibler

This program explains and examines the basic principles upon which statistical techniques are based. The general topics covered are fundamentals of statistics; errors, accuracy and approximation; charts for named categories of data; time series; and observation for values of a variable.

The student needs only a working knowledge of fractions, ratio and proportion, and simple algebra in order to complete the course successfully.

Schedule: Classes will be scheduled for Monday, Wednesday, and Friday or Tuesday and Thursday at the following times:

Section A: 9:00-10:30

Section B: 10:30-12:00

Section C: 12:30-2:00

Section D: 2:00-3:30

Section E: 3:30-5:00

Example: Mr. John Doe; Monday, Wednesday, and Friday, 10:30-12:00.

After nomination has been received, schedules will be made by the Program Coordinator and the nominee for the most suitable time. Indicate your preference of section and days, from the information above, on the nomination form.

Courses will be held:

October 6, 1969-January 9, 1970

February 2-April 24, 1970

May 4-July 24, 1970

Nominations due:

September 15, 1969

January 19, 1970

April 13, 1970

Course Fee: \$70.00. Fee includes tuition and consultation with Mr. William Kibler, special instructor.

D3-732 Computer Solution of Statistical Analysis Problems

(See p. 32)

For further information call C. Paul Barlow, Code 111 (388) 6410.

Curriculum in Communications and Modern Learning Methodology

Center for Modern Learning Methodology

The Center for Modern Learning Methodology provides group and individual education through the media of programmed instruction and other modern learning technology. Programmed instruction helps the student advance confidently in easy step-by-step procedures through difficult material. He learns at his own pace and receives immediate confirmation on his progress.

The overall objectives of the Center are as follows:

- To offer programmed courses in various subject matter fields that can be completed at one time or broken up over an extended period to fit individual or agency needs.
- To provide professional assistance or subject matter resources to help students select and complete programmed courses fitted to their interests and needs.
- To offer seminars and workshops to inform and up-date interested individuals in what the latest theories and applications are in educational technology.
- To act as a contractor for government agencies in defining their training needs and preparing behavioral instructional designs to meet their training requirements.

Assisting the Graduate School in developing a forward looking program in educational technology is a committee of individuals who are themselves committed and engaged in this area. Gathered from several Government agencies, the Committee on Communications and Modern Learning Methodology meets several times during the year and is a source of new ideas.

COMMITTEE

BERT HOLTBY, *Forest Service, Department of Agriculture, Chairman*

DAVID BUSHNELL, *Office of Education,
Department of Health, Education, and Welfare*

ERWIN DRAHEIM, *Office of Personnel, Department of Agriculture*

NORMAN GIBBARD, *Forest Service, Department of Agriculture*

JOHN GORE, *Agriculture Research Service, Department of Agriculture*

BERNARD JANKOWSKI, *Office of Economic Opportunity*

LES REDDING, *Small Business Administration*

CHARLES WAKEFIELD, *Consumer and Marketing Service,
Department of Agriculture*

DAVID WEAVER, *Federal Deposit Insurance Corporation*

Those wishing more information about the Committee, the Center and its activities, and what the Graduate School is doing in this field, please call Mr. C. Paul Barlow, Supervisor, Center for Modern Learning Methodology, on Code 111 (DU 8-) 6410 or 6600.

D2-95 Reading Improvement Program

Paul Barlow, Lawrence Lev Dahl, Betty Tin

This course is **designed for adults with average or above-average reading ability**. It is taught by a full-time reading professional, and incorporates the latest and most advanced techniques for developing the maximum potential of each individual learner. Instruction is oriented toward on-the-job reading needs of Federal employees. Improvement is determined by a Reading Efficiency Index which combines rate and comprehensions, not just speed alone.

The objective of the Reading Improvement Program is **to increase the over-all reading efficiency of each participant to his maximum potential**. This includes: • At least doubling or tripling initial reading speed while improving comprehension, retention and recall • Improving purposefulness, flexibility, selectivity and building critical reading skills • Developing an organized and effective approach to on-the-job reading matter for greater work efficiency

Schedule: Section A: 9:00-10:30 a.m. Section B: 10:45 a.m.-12:15 p.m.

Courses will be held:

August 12-September 18, 1969
September 30-November 6, 1969
January 6, 1970-February 12, 1970
February 17-March 26, 1970
March 31-May 7, 1970
May 12-June 18, 1970
June 23-July 30, 1970
August 4-September 10, 1970

Nominations due:

July 28, 1969
September 15, 1969
December 22, 1969
February 2, 1970
March 16, 1970
April 17, 1970
June 8, 1970
July 20, 1970

Course Fee: \$60.00. This fee includes tuition, books, and consultation with the teacher.

D2-21 Developing Communications Skills

Paul Barlow, Betty Tin

All managers and supervisors know the need for basic principles of communication, but they often do not have the skills to apply these principles. This seminar deals specifically with this problem and will help participants to identify, analyze, and improve their own skills in communicating with others in face-to-face situations. Each session will be built around a film presentation and carefully related work materials and activities. In addition guest lecturers will speak on specific communication problems.

This course will increase participants' communications skills in: • Giving and receiving instructions • Reviewing performance and counselling subordinates • Handling disagreement and discipline • Building cooperation and understanding • Working with others to effectively solve problems and make decisions • Improve listening skills

Schedule: Classes will meet from 9:00-11:00 a.m. every Monday and Wednesday.

Courses will be held:

October 13-November 12, 1969
March 16-April 15, 1970

Nominations due:

September 22, 1969
February 23, 1970

Course Fee: \$125.00. Fee includes tuition, workbooks, and discussion guides.

D2-04 Effective Listening

Paul Barlow, Betty Tin

Can you mentally organize the spoken word while it is being spoken? Can you separate key words from irrelevant statements in the oral message?

This is a short and effective application of programmed instruction with audio presentation designed for anyone whose activities require that he capture the spoken content. Through lecture, group discussion, films, and directed practice in the classroom, the participant develops and retains the skills to quickly understand and summarize any oral message.

The objective of the Effective Listening Program is to increase the overall listening ability of each participant to enable him to: • Produce a complete, accurate summary, written or oral, of spoken information • Constantly analyze what is being said • Outline by the use of key words • Ignore irrelevant materials and digressions • Minimize the distracting effect of emotional and hurried delivery, ethnic and regional accents, background noise, and statements with which the listener may disagree • Apply the improved listening skill (as much as 140%) automatically in his work.

For further information call C. Paul Barlow, Code 111 (388) 6410.

Schedule: Classes will be held from 9:00-4:00 p.m. A one-day course on the following Fridays:

September 19, 1969
October 17, 1969
November 14, 1969
December 12, 1969
January 16, 1970
February 13, 1970

March 20, 1970
April 17, 1970
May 15, 1970
June 19, 1970
July 17, 1970

Nominations are due two weeks before the start of each course.

Course Fee: \$20.00. Fee includes tuition, workbooks, and class handouts.

D2-08 Advanced Effective Listening

Paul Barlow, Betty Tin

Do you have the skills to listen to multiple speakers? Are you able to classify, organize, and summarize the main points of the message in an effective note-taking format?

Capturing the content of multiple speakers and acquiring a simple note-taking skill are just two of the skills that Advanced Listening will cover. This course teaches the application of listening improvement to group discussions, meetings, and conferences. Advanced Effective Listening enables participants to come better prepared to meetings, organize ideas for a discussion, and organize notes for further use.

In addition to reviewing and enhancing the skills in Effective Listening, this program will enable the participant to: • Develop listening skills in group discussions • Capture the content of multiple speakers • Develop a simple note-taking system as an application of listening skills • Develop listening and note-taking skills in relation to group discussions

Schedule: Classes will be held from 9:00-4:00 p.m. A one-day course on the following Fridays:

September 12, 1969
October 10, 1969
November 21, 1969
December 19, 1969
January 9, 1970
February 6, 1970

March 13, 1970
April 10, 1970
May 8, 1970
June 12, 1970
July 10, 1970
August 14, 1970

Nominations are due two weeks before start of each course.

Course Fee: \$45.00. Fee includes tuition and workbooks.

D2-12 Government Report and Letter Writing

Betty Tin

This short course is designed to improve the caliber of Government reports and correspondence through the use of lectures, class discussion, and individual counseling on writing exercises.

The essentials of good report and letter writing will be covered. The U.S. Government **Correspondence Manual** will be the guide for the letter writing portion. The letter writing section of the course will emphasize sincerity, simplicity, clarity, and conciseness. These principles will be carried over to the report writing, which will also emphasize the importance of assembling and analyzing information, planning the outline, writing the rough draft and rewriting the report.

Upon completion of this course the participant will be better able to: • Plan and organize his reports, letters, memoranda, and other correspondence • Write more simply, clearly and concisely • Achieve more strength and vigor in his writing through the use of exact words, active verbs, style variations and sentence structures

Schedule: This program will meet for two weeks each Monday, Wednesday, and Friday during the following days and times:

September 22-October 3, 1969	1:30- 4:30	March 23-April 3, 1970	1:30- 4:30
October 20-October 31, 1969	1:30- 4:30	April 20-May 1, 1970	9:00-12:00
November 24-December 5, 1969	9:00-12:00	May 25-June 5, 1970	9:00-12:00
January 19-30, 1970	9:00-12:00	June 29-July 10, 1970	1:30- 4:30
February 16-March 2, 1970	1:30- 4:30	July 27-August 7, 1970	9:00-12:00

Nominations are due two weeks before the start of each course offering.

Course Fee: \$60.00. Fee includes tuition, handout materials and consultation sessions.

For further information call C. Paul Barlow, Code 111 (388) 6410.

D2-10 Effective Writing

William Raspberry, Lillian Levy, Betty Tin

This is a six-week seminar designed to help the participant learn to write for specific audiences. Participants learn by doing as they present their own work for criticism and evaluation by the instructor and group. Exercises are used to develop clarity and conciseness. Classes are kept small to allow for extensive individual consultation.

On completion of this course, the participant will: • Be able to communicate in writing his ideas and findings to administrators, the public, and other specialists • Have developed the ability to look critically at his writing

Schedule: Classes will meet on Tuesdays and Thursdays during the following days and times:

September 30-November 6, 1969	9:30-11:30
January 20-February 26, 1970	9:30-11:30
March 17-April 23, 1970	1:30- 3:30
May 5-June 11, 1970	1:30- 3:30

Nominations are due two weeks before the beginning of each program.

Course Fee: \$115.00. Fee includes tuition, work materials, and consultation sessions.

DP2-9 Career English

Betty Tin

This complete English program is designed to give the student a thorough comprehension and practical application of the various principles that produce effective communication.

The course is divided into three parts, grammar, punctuation, and writing, and each part may be taken separately as needed by the student.

Schedule: Classes will be scheduled for Monday, Wednesday, and Friday or Tuesday and Thursday at the following times:

Section A: 9:00-10:30	Section D: 2:00-3:30
Section B: 10:30-12:00	Section E: 3:30-5:00
Section C: 12:30-2:00	

Example: Mr. John Doe; Monday, Wednesday, and Friday, 10:30-12:00; Jane Smith; Tuesday and Thursday, 2:00-3:30.

After nomination has been received, schedules will be made by the Program Coordinator and the nominee for the most suitable time. Indicate your preference of section and days, from the information above, on the nomination form.

Courses will be held:
October 6, 1969
February 2-April 24, 1970
May 4-July 24, 1970

Nominations due:
September 15, 1969
January 19, 1970
April 13, 1970

Course Fee: \$115.00 for the complete program; or \$50.00 for the grammar course, \$30.00 for the punctuation course, and \$30.00 for the writing course. Tuition includes private consultation sessions with the special English and writing instructor, Mrs. Betty Tin.

D-15 Oral Communications

Jane Glennie

This course is designed for the professional government employee and emphasizes speaking principles and techniques basic to effective oral communication. The student is taught by demonstrated examples how to conduct himself in a variety of oral communication experiences. Time is allowed for each student to experiment with these techniques in class under the guidance of a qualified instructor. **The objective of the course is to enable each student to become a reports and the styles of presentation.**

Schedule: Classes meet from 1:30-3:30 each Tuesday and Thursday for six weeks.

Courses are held:	Nominations due:
October 28-December 9, 1969	October 13, 1969
February 3-March 12, 1970	January 19, 1970

Course Fee: \$115.00. Fee includes tuition, books, notebook materials, and consultation sessions:

For further information call C. Paul Barlow, Code 111 (388) 6410.

D6-37 Briefing for Managers

Jane Glennie

This program is designed for the professional government employee who is called upon to brief and present material to supervisors, management, committees, etc., and who must know how to prepare his material to get the best results. **Briefing** will analyze the art of condensing reports and the styles of presentation.

When completing this program the participant will be able to: • Effectively Prepare a Speech, Report, or Brief • Understand Style, Variety, and Choice of Words in Presenting the Brief • Better Understand the Use and Timing of Visual Aids and Gestures • Know the Different Audiences and How Best to Reach Them • Interview for Information • Be More Comfortable in Front of People when Presenting Information

Schedule: Classes will meet on Monday, Wednesday, and Friday from 9:00-5:00 p.m.

Courses will be held:

September 29-October 3, 1969
April 27-May 1, 1970

Nominations due:

September 15, 1969
April 13, 1970

Course Fee: \$115.00. Fee includes tuition, books, notebook and material.

D4-17 Dictation for Managers

(See p. 9)

D6-12 Management Problem-Solving Discussion Skills

(See p. 10)

DP3-9 Computers: A Four-Part Course in Programing

(See p. 46)

DP-550 Principles of Chemistry through Programed Learning

(See p. 46)

DP3-4 Basic Statistics

(See p. 47)

For further information call C. Paul Barlow, Code 111 (388) 6410.

Curriculum in Secretarial and Office Management

D4-6 Secretarial Techniques

Frankie Swenholt

Description: This effective and proven short course is designed to help the secretary become a more efficient, productive, self-reliant aid to the executive. It will encompass and emphasize the following topics:

1. Performance, such as organization, memory, management of time and work;
2. Personality, such as appearance, behavior and attitudes; and
3. Communications, such as telephone manners, letter writing, and editing.

Objectives: Upon completion of this course the participant will be better able to: • Understand and thus fulfill better her position as an executive aid • Organize time and office duties more effectively • Screen correspondence more efficiently • Write and edit correspondence more effectively • Achieve a better image for the office by improved relations with office visitors and telephone contacts.

Schedule: 1:15 p.m.-4:30 p.m. on Monday, Wednesday, and Friday

Courses will be held:

September 8-19, 1969
October 13-24, 1969
November 3-14, 1969
December 8-19, 1969
January 5-16, 1970
February 2-13, 1970
March 2-13, 1970
April 6-17, 1970
May 11-22, 1970

Nominations due:

August 18, 1969
September 22, 1969
October 27, 1969
November 17, 1969
December 15, 1969
January 12, 1970
February 9, 1970
March 16, 1970
April 20, 1970

Nominations accepted after due date if class space is available

Classes are limited to 25 participants to allow maximum time for individual participation.

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Course Fee: \$60.00, payable in advance. Fee includes text books and class material.

Nominations for this course may be made by using the nomination form format given on the inside back cover of this bulletin.

D4-15 Executive Secretarial Seminar: For Improving the Secretary's Managing Skills

Description: The executive secretary is many things to many people. To her boss, she is a loyal and trusted extension of himself, to the clerical staff, she is the spokesman, example, personnel and work arbitrator. To visitors, she is the ambassadress of graciousness and thoughtfulness. To co-workers, she is the quintessence of cooperation and helpfulness.

The executive secretary must demonstrate accuracy, flexibility, initiative and sound judgment. She must promote a harmonious atmosphere for the smooth flow of work into and out of the office.

This program is designed to aid the executive secretary in performing her difficult role in helping her executive be a more effective manager.

Objectives: This program will help the participant to: • Examine the functions and problems of the executive secretary • Look closely at herself and her performance so that she may better achieve her potential • Understand the basic tenets of human relations so that she may better handle office problems and exert a positive influence on co-workers • Apply the principles of effective writing so that she may better handle office correspondence.

Schedule: Classes meet for two weeks every Monday, Wednesday and Friday from 9:15 a.m.-12:30 p.m.

Courses will be held:

September 8-19, 1969
October 13-24, 1969
November 3-14, 1969
December 8-19, 1969
January 5-16, 1970
February 2-13, 1970
March 2-13, 1970
April 6-17, 1970
May 11-22, 1970

Nominations due:

August 18, 1969
September 22, 1969
October 27, 1969
November 17, 1969
December 15, 1969
January 12, 1970
February 9, 1970
March 16, 1970
April 20, 1970

Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Qualifications: Classes are limited to 25 participants at the GS-6 level and above.

Course Fee: \$95.00, including tuition, books, and materials.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D4-25 Space Management: Office Layout Workshop

A five-day workshop to help participants develop a working knowledge of space management techniques.

Description: A five-day program to train Space Management Technicians (GS 5-12). The program will consist of skilled instructors directing group interaction, lectures, discussions, and practical office layout problems to develop the skills and techniques necessary for office layout and space management.

Objectives: When participants have finished this course they should have developed greater efficiency and expertise in the following areas: • Development of space requirements • Concept and execution of an office layout • Templating techniques • Planning and executing a move • Principles and guides to effective space layout.

The seminar has been planned and will be under the direction of Mackey W. White, AIA, B.S. (Architecture) Tulane University, assisted by Gerald S. Radley, Associate, Washington Metropolitan Chapter, AIA. Mr. White was responsible for building construction, real estate and space management in the U.S. Department of Agriculture from 1943 to 1968. Mr. Radley served as director of various divisions and staff offices in the Office of Space Management, G.S.A. from 1949 to 1969.

These instructors will be assisted as required by a panel of working architects, engineers and professional space managers of Agriculture, Defense, H.U.D., G.S.A., Treasury and other government agencies.

Schedule:

Courses will be held:

September 29-October 3, 1969
November 17-21, 1969
January 19-23, 1970
March 9-13, 1970
July 27-31, 1970

Nominations due:

September 8, 1969
October 27, 1969
December 22, 1969
February 16, 1970
July 6, 1970

Nominations accepted after due date if class space is available.

Location: Classes will be held at the National Press Building, 529 Fourteenth Street, N.W., Washington, D.C.

Course Fee: \$125.00, includes tuition, notebooks and all materials.

Nominations for this course may be made by using the nomination form format given on the inside back cover page of this bulletin.

D3-112 ADP Orientation for Secretaries and Clerks

(See p. 19)

DP2-9 Career English

(See p. 51)

For further information call Mr. Dee W. Henderson, Code 111 (388) 3247.

D2-12 Government Report and Letter Writing

(See p. 50)

D2-95 Reading Improvement

(See p. 49)

D2-04 Effective Listening

(See p. 49)

D4-4 Success in Supervision

(See p. 14)

For further information call Mr. Dee Henderson, Code 111 (388) 3247.

FACULTY

The year following the name represents the first year of association with the Graduate School.

- ALEXANDER, WILLIAM T., (1967). B.S., California State. Chief, Information Systems Branch, Bureau of Prisons.
- ANDERSON, MILLARD A., (1968). Chief, Software and Standards, OEO Data Processing Center.
- AUSTIN, CHARLES F., (1966). Ph.D., Harvard. Colonel, Infantry, USA (Ret.). Management Consultant.
- AXVIG, ROBERT H., (1968). B.S., North Dakota State University. Survey Statistician, SRS-USDA.
- BALDAUF, TONY M., (1951). Assistant Director, Procurement and Property Management, Office of Plant and Operations, USDA
- BEARDEN, GARY D., (1964). M.S., Texas A&M. President, Financial Systems Corporation.
- BECKER, EDWIN, (1967). Ph.D., University of California at Berkeley. Chief, Molecular Biophysics, National Institutes of Health.
- BELLER, NORMAN, (1967). M.A., University of Nebraska. Agriculture Estimates Division, Statistical Methods Group, USDA.
- BERGSMITH, RONALD G., (1969). Electronic Photocomposition Unit, Government Printing Office.
- BOYLE, JOHN J., (1968). Special Assistant to Production Manager, U.S. Government Printing Office.
- BROOKS, EDWARD W., (1967). Chief, Property Management Division, Office of Administrative Services, Treasury.
- BROOKS, EMERSON M., (1968). M.S., American University. Officer for Career Development and Foreign Program, SRS-USDA.
- BUCHANAN, LEE K., (1962). M.D., Iowa. Chief of Employee Health Division, USDA.
- CARLSON, JACK W., (1967). Ph.D., Harvard. Assistant Director for Program Evaluation, Bureau of the Budget.
- CARNES, BEN J., (1968). USAFI-GED Director, Analysis and Programing, U.S. Navy Finance Center.
- CASSIDY, WILLIAM J., (1967). B.S., Maryland. Digital Computer Programmer, Civil Aeronautics Board.
- CHAROUHIS, GREGORY J., (1967). Burdett Business College. Digital Computer Specialist, Department of Commerce.
- CLOSE, KENNETH G., (1964). B.S., River Falls State (Wisc.). Chief, Programming Branch, Bureau of Public Roads, Department of Transportation.
- COLLINS, HAROLD V., (1968). Old Dominion College, Systems Analyst, Department of Commerce.
- CONDIE, JAMES W., (1967). M.S., Utah State. Mathematical Statistician, Statistical Reporting Service, USDA.
- CONNOLLY, JOHN J., (1967). B.B.A., Minnesota. Computer Specialist, NAV-COSSACT Department of Navy.
- COOK, LEROY L., JR., (1962). B.A., Albion. Johns Hopkins University.
- COX, JOHN J., (1968). Brooklyn College. Sales Manager, Fabri Tek Institute Inc.
- CROSSMAN, DALE, (1969). B.S., Springfield College (Mass.). Management Development Specialist, Dept. of Defense.
- DE ANGELIS, LOUIS B., (1968). M.A., George Washington. Program Chief, Management Development Training, Dept. of Defense.
- DOLES, WILLIAM E., (1967). Contract Specialist, Goddard Space Flight Center, NASA.
- DU PEZA, JULES B., (1968). M.S., U.S. Naval Post Graduate School. Systems Analyst, Department of Transportation.
- DUDLEY, HELEN, (1965). B.S., Simpson College. Project Officer for Management Development, Training and Development Division, Office of the Deputy Chief of Staff for Personnel, Army.
- EITINGTON, JULIUS E., (1966). M.A., University of Chicago. Chief, Training Branch, Division of Personnel Management and Manpower, National Park Service, Department of Interior.
- EVANS, EDWIN R., (1968). B.A., Washington University. Chief, Computer Operations Branch, Federal Highway Administration.
- FERBER, JOHN L., (1967). B.S., Georgetown University. Computer Systems Analyst, NASA.
- FERNANDEZ, EDWARD W., (1968). M.S., New York University. Statistician, Bureau of Census.
- FRAHER, J. J., (1967). M.S., Drexel Institute of Technology. Management Analyst, Social Security Administration.
- GARGANO, H. MICHAEL, (1967). B.S., Virginia Polytechnic Institute. Acting Chief, Data Processing and Math. Section, National Center for Radiological Health, U.S., Public Health Service, HEW.
- GARLOCK, ROBERT A., (1967). M.A., George Washington University. Director, Management & Organization Division, Office of Administration for Domestic and International Business, Department of Commerce.

- GARON, ALBERT C., (1967). B.A., Maryland University. Planning-Programming-Budgeting Systems Officer, Economic Development Agency, Department of Commerce.
- GLENNIE, JANE, (1967). M.A., Indiana University. Communications Consultant.
- GORDON, MARVIN F., (1968). Ph.D., Columbia University. Chairman, Dept. of Geography and Regional Science, George Washington University.
- GREEN, CHARLES E., (1967). Union College. Chief, Office of Electronic Systems, Public Health Service, HEW.
- GUBIN, E. K., (1960). LL.B., University of California. Attorney at Law. Legal consultant to Industry and Government.
- GUNTHER, V. SAMUEL, (1959). Chief, Contract and Procurement Management Division, Office of Plant and Operations, USDA.
- GURA, BENJAMIN, (1968). B.S.S., College of the City of New York. Chief, International Statistical Training, Bureau of the Census.
- HARLESS, J. H., (1969). President, J. H. Harless, Associates. Educational consultant.
- HERRELL, HENRY G., (1966). LL.B., National (George Washington). Management Consultant.
- HOFFMAN, MARION, (1966). B.A., District of Columbia Teachers' College.
- HORNSTEIN, IRWIN, (1966). Ph.D., Georgetown. Research Chemist, Market Quality Research Division, Agricultural Research Service, USDA.
- HORRORTH, RICHARD W., (1968). B.A., Los Angeles State. Senior Associate, Leadership Resources, Inc.
- HOWE, LAWRENCE J., (1967). A.B.A., American University. Technical Assistant to Director of Systems Division, Naval Facilities Engineering Command.
- JENKINS, WARDER B., (1968). B.Sci., Ohio State University. Consultant, Bureau of Census.
- JOHNSON, JOSEPH P., (1968). M.S., Howard University. Computer Specialist, Federal Deposit Insurance Corp.
- JONES, ROBERT E., (1968). B.S., Huston-Tillotson. Systems Analyst, Dept. of Transportation.
- JONES, WILLIAM J., (1969). University of Maryland. Associate Program Writer, IBM.
- KATZ, ROBERT N., (1968). M.B.A., Harvard. Professor of Business Administration, University of California.
- KERR, DAVID V., (1967). B.A., Cornell. System Analyst, CIA.
- KIBLER, WILLIAM E., (1963). M.S.A., Georgia. Statistical Methods Section, Research and Development Branch, Standards and Research Division, Statistical Reporting Service, USDA.
- KNUDSEN, A. RAY, (1968). B.S., Oregon. Chief, Real Estate Division, Plant and Operations, USDA.
- KRAUSE, KENNETH R., (1969). Ph.D., Purdue. Agricultural Economist, Economic Research Service, USDA.
- LAIGN, MARJORIE A., (1968). B.S., West Virginia Wesleyan College. Analyst Programmer, Process Consulting and Computing Inc.
- LEIBSLY, FRANKLIN W., (1967). Automatic Data Processing Division, Domestic and International Business, Department of Commerce.
- LENZ, ALLEN J., (1967). Ph.D., Stanford. Analyst, Office of Assistant Secretary of Defense.
- LEVDAHL, LAWRENCE, (1965). B.A., University of Virginia. Teacher and Consultant.
- LOKEY, CHARLES G., (1968). B.S., American University. Computer Systems Analyst, NASA.
- LONG, RAYMOND J., (1967). LL.B., Catholic University. Director, ADP Division, Office of Administration for Domestic and International Business, Department of Commerce.
- MACKIE, ARTHUR B., (1967). Ph.D., Iowa State. Assistant Chief, Economic Development Branch, Foreign Development and Trade Division, ERS, USDA.
- MANO, CATHERINE S., (1968). Ph.D., American University. Mathematical Statistician, Bureau of Census.
- MARTIN, WILLIS S., JR., (1967). B.A. Franklin and Marshall College. Instructor, Washington Educational Center, IBM.
- MCDANIEL, BENJAMIN T., (1967). Ph.D., North Carolina State. Geneticist, Animal Husbandry Research Division, ARS, USDA.
- MILLER, ROBERT H., (1965). Ph.D., North Carolina State. Geneticist, Animal Husbandry Research Division, ARS, USDA.
- MILLER, MAX R., (1968). Digital Computer Operator, Washington Data Processing Center, Statistical Reporting Service, USDA.
- MINNIS, ROY B., (1963). Ph.D., Iowa. Adult Education Specialist, Office of Education, HEW.
- MONLOCH, ROBERT J., (1968). Marquette University. Agricultural Conservation Specialist, ASCS-USDA.
- MOSTOW, ELMER, (1947). LL.M., George Washington. Director, Office of Plant and Operations, USDA.

- O'BRIEN, RAYMOND A., (1968). Public Administration, Georgetown. Director, Planning and Utilization Division, Office of Space Management, GSA.
- O'CONNOR, THOMAS J., (1968). Ph.D., Stanford. Naval Supply Systems Command.
- ONCKEN, WILLIAM, (1963). B.S., Princeton. Management Consultant.
- O'QUINN, FLOYD E., (1968). B.S., University of Florida. Mathematical Statistician, Bureau of Census.
- PABST, WILLIAM R., (1966). Ph.D., Columbia University. Consultant, Quality Control and Reliability.
- PALLANSCH, MICHAEL J., (1955). Ph.D., Minnesota. Head, Concentrated Milk Investigations, Eastern Utilization Research Branch, Agricultural Research Service, USDA.
- PARENT, ELIAS A., JR., (1967). Ph.D., Stanford. Staff Assistant, Office of the Assistant Secretary of Defense (Systems Analysis).
- PASKO, THEODORE V., (1967). B.S., Syracuse University. Systems Engineer, IBM.
- PAYNE, RICHARD F., (1968). B.S., Georgia Tech. Program Manager, Space and Transportation, Facilities Management Division, Internal Revenue Service, Treasury.
- PELISSIER, RAYMOND F., (1968). Ph.D., American University. Management Consultant.
- PETERS, DARREL F., (1967). Contract Specialist, Chief, Division of Administrative Service, OMS, USDA.
- PLITT, WILLIAM C., (1969). Certificate in Industrial Supervision & Management, Johns Hopkins. Management Development Specialist, Department of Defense.
- POTTS, GLADYS S., (1968). Chief, Forms Management Section, Bureau of Census.
- POULIOT, LEONARD B., (1965). M.A., George Washington. Director of Personnel, Smithsonian Institution.
- PRESCOTT, RICHARD A., (1968). University of Vermont. Computer Specialist, DOD.
- QUINLAN, JAMES J., (1967). B.A., Rutgers. System Analyst, Federal Highway Administration, Department of Transportation.
- RADLEY, GERALD S., (1967). George Washington. Management Consultant.
- RASPBERRY, WILLIAM, (1967). B.S., Indiana Central College. Columnist for the Washington Post.
- REED, DON J., (1969). Electronic Photo-composition Unit, Government Printing Office.
- RHODES, PERRY A., (1969). M.B.A., University of Southern California. Management Systems Analyst, Management Systems Division, NASA.
- RIXSE, JOHN H., JR., (1958). B.S. in E.E., George Washington, Chief, Power Division, Office of Engineering, Agency for International Development, Department of State.
- ROBIN, EDWARD A., (1968). MSEE, New York University. Real-time Programming, IBM.
- RONDEAU, GORDON P., (1968). B.S., University of Massachusetts. Systems Engineer, IBM.
- RUMMLER, GEARY, (1969). Ph.D., University of Michigan. Education and management consultant.
- SALMON, Stephen R., (1967). M.L.S., University of California, Berkeley. Assistant Director, Processing Department, Library of Congress.
- SCHAEFER, WILLIS C., (1967). Ph.D., Chicago. Management Analyst, Office of Management Planning, Dept. of State.
- SCHAUB, JOHN R., (1967). Ph.D., University of Illinois. Agricultural Economist, Economic Development Branch, Foreign Development and Trade Division, ERS, USDA.
- SCHINDLER, DOROTHY L., (1968). M.A., Georgetown University. Social Science Analyst, Bureau of Census.
- SCHROEDER, ROGER GLENN, (1967). Ph.D., Northwestern. Systems Analyst, Office of the Secretary of Defense.
- SHERROD, JOHN, (1958). M.S., Pennsylvania State University. Director, National Agricultural Library, USDA.
- SHUTE, FRANCES R., (1967). M.A., George Washington. Management Specialist (Information System), NASA.
- SMITH, RAYMOND W., (1967). A.B., Nebraska. Systems Analyst, Bureau of Public Roads, Department of Transportation.
- SMITH, ROBERT S., (1964). Ph.D., Illinois. Staff Analyst, Research Analysis Corporation.
- STANDIFER, G. VAN, (1967). Peters Business School. Systems Analyst, Bureau of Public Roads, Department of Transportation.
- STEWART, NATHANIEL, (1963). Ph.D., Columbia. Management Consultant.
- STOCKMENT, ROBERT L., (1965). Chief of Training Division, Small Business Administration.
- STRAUSS, BERTRAM, (1965). B.S., Wharton School of Business Administration. Consultant.

- SULLIVAN, JAMES W., (1967). B.E.E., Manhattan. Systems Engineer, IBM Corp.
- SUNDQUIST, WESLEY B., (1969). Ph.D., Michigan State. Director, Farm Production Economics Division, ERS, USDA.
- SUTER, GLENN W., (1967). M.S., Virginia Polytechnic Institute. Head, Enumerative Surveys Section, Survey and Data Division, SRS, USDA.
- SWENHOLT, FRANKIE P., (1966). Syndicated Columnist of "Southern Style" and Educational Director of a finishing school.
- TANG, PER-CHING, (1968). Ph.D., London University. FAO of United Nations.
- TRELOGAN, HARRY, (1967). Ph.D., Minnesota. Administrator, Statistical Reporting Service, USDA.
- VAN DERSAL, WILLIAM R., (1958). Ph.D., Pittsburgh. Deputy Administrator for Management, Soil Conservation Service, USDA.
- VELANDER, WALLACE E., (1967). B.A., University of Maryland. Head, Data and Reports Management Section, NASA.
- VERT, DAVID H., (1969). B.S. in E.E. Iowa State University. Systems Engineer, IBM.
- WALLACE, MONTIE, (1967). B.S., Texas Technological College. Agricultural Statistician, SRS, USDA.
- WALTZ, FREDERICK, (1967). Ph.D., Purdue. Supervisor, Computing Laboratory, Biometrical Services, ARS, USDA.
- WHITE, JOHN V., (1968). M.S., University of Florida. Technical Staff, Communications System, Inc.
- WHITE, MACKEY W., (1967). B.S., Tulane. Management Consultant.
- WILLEY, EDMUND G., (1967). Senior Systems Analyst, Bureau of Public Roads, Department of Transportation.
- WILLIAMS, CHARLES W., (1968). B.S., Alabama. Staff Associate, Office of Planning & Policy Studies, National Science Foundation.
- WOOD, Elmo L., (1969). B.C.S., Benjamin Franklin. Electronic Photocomposition Unit, Government Printing Office.
- WRIGHT, CLAUDE R., (1967). M.S., East Texas State Teachers College. Assistant Chief, Division of Employment and Training, Office of Personnel Management, Office of the Secretary, Department of Interior.
- ZIMMER, RALPH W., (1968). M.S.C.E., Purdue. Highway Research Engineer, Dept. of Transportation.
- ZINGER, NORMAN GRIFFITH, (1967). B.A., American University. Psychodramatist, HEW.

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Do you want to be on the mailing list (or correct your present address) to receive Special Programs Announcements and Catalogs?

If so, give name and complete address below and mail to:

Miss Vera Jensen
Graduate School, USDA
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Washington, D. C. 20250

Name.....

Address.....
(Street)

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Do not detach, save format for subsequent reference.

Agencies should use their own agency letterhead for making nominations for courses using the following format, supplying all of the information requested. Individuals without a sponsoring agency may use plain paper.

NOMINATION FORM *

Special Programs Department • Graduate School, USDA • Date:.....

1. Name.....Age.....

Title.....

GS (or equivalent).....Social Security No.....

Department or Agency.....

Office Mailing Address.....

Home Mailing Address

Office Telephone.....

(Direct Dial)

Code and Exten.)

Home Telephone.....

2. Course (Number and title) for which nominated.....

3. Dates for which nominated:

4. Circle highest school grade completed:

8, 9, 10, 11, 12; College: 13, 14, 15, 16

List any college degrees:.....

5. PLEASE PAY IN ADVANCE or ATTACH PURCHASE ORDER if required by your agency and/or furnish the following information for billing:

Billing Address.....

.....

.....

Other billing information required by your agency.....

.....

6. Person to be notified concerning acceptance of this nomination:

Name.....Title.....

Office Address.....

Office Telephone.....

(Direct Dial)

(Code and Exten.)

Signature and Title of the official authorizing this nomination:

.....

7. Non-sponsored students will omit questions 5 and 6 and attach check for full amount of class fee.

8. Make checks payable to: Graduate School, USDA

Send nominations to:

Special Programs Department
Graduate School, USDA
277 National Press Building
529 Fourteenth Street, N.W.
Washington, D. C. 20004

*Your letterhead may be used in supplying the above information.

